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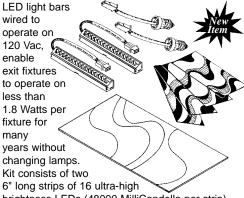
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115 VAC LED LIGHT BARS SET OF TWO



brightness LEDs (48000 MilliCandella per strip), 11.75" x 7.25" red plexiglass diffuser, 4 adhesive-backed mylar reflectors and two 0.65" diameter screw-base adaptors. Ultra-high brightness red LEDs, clear in off-state. Great for attention-getting displays of all kinds. UL.

CAT# LBR-16

\$8.50 each • 10 for \$ 7.00 each

ULTRABRIGHT LED KEYCHAIN FLASHLIGHT

Don't get caught in the dark again.
Ultrabright, white LED, supplies enough light to let you read in the dark, find keyholes, read maps.
LED with lithium battery are reliable and long-lasting.
Clear weather-resistant plastic case with keychain attachment.

CAT # GL-1 \$7.95 each

LASER POINTER

2.5" long laser pointer with a keychain and snap-clip. Projects an intense solid red dot up to 500 yards. Perfect for sales meetings, lectures. A great gift item. Includes three LR44 batteries.

CAT # LP-506

\$6.50 each

\$6.50 each

2" SERIAL THERMAL PRINTER

Panasonic (Matsushita)
EPT-1014LW2
24 character,
144 dot matrix
thermal printer for
2" (50mm) paper.
FPC flexi-connector
with 20 pin (1.25mm pitch)
connector. Mates with Molex
52045-2010 connector.
Removed in good
condition from new

equipment. Includes spec/ hook-up sheet.

CAT # PRNT-4 \$ 6.50 each

SPEED CHUCK FOR DREMEL TOOL

Allows you to quickly and easily change accessory bits on Dremel and similar rotary tools without changing collets. It will account all accessory bits with 1



accept all accessory bits with 1/32" to 1/8" shanks.

CAT# CHK-1 \$5.00 each

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LIQUID CRYSTAL DISPLAYS (LCDs)

16 CHARACTER X 1 LINE LCD

Emerging Display Technologies # ED16100GR





5 x 7 dot format. Gray characters. 2.58" x 0.63" viewing area. 3.16" x 1.43" module. Includes hook-up sheet. CAT # LCD-75 \$ 4.50 each

16 CHARACTER X 1 LINE LCD

Samsung # SMC-1611A 5 x 7 dot format.

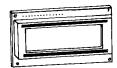


2.5" x 0.54" viewing area. 3.15" x 1.5" module. Exact specs and data not available at this time. We supply a generic hook-up sheet.

CAT # LCD-55 \$4.50 each

2 X 16 SERIAL LCD

Scott Edwards Electronics Useful if your BASIC stamp project needs to interact with a human user.



Requires only one I/O line, +5 Volts DC and ground, and are controlled with simple SEROUT instructions from the BASIC stamp.

CAT # 27910 \$49.00 each

20 X 1 LARGE CHARACTER LCD

Samsung # UC-20102-GNAR5 F Large 5 x 7 dot characters, 0.46"H x 0.26" W. Blue characters on gray background. 6.1" x 0.64" viewing area. 7.38" x 1.32" module size. Includes hook-up sheet. CAT # LCD-76 \$ 6.50 each

24 CHARACTER X 2 LINE LCD w/ LED BACKLIGHT

Optrex # DMC24201 0.21" high characters. 5 X 8 dot format. LED backlight. 0.63" x 3.7"



viewing area. 1.53" x 4.7" module size. Removed in good condition, from new equipment. Prepped with 4" wire leads terminated with 15 pin socket connector (0.075" centers). Includes hook-up diagram.

CAT # LCD-74 \$ 9.50 each

24 CHARACTER X 2 LINE LCD

FDT# EW24208YLY. Display size: 3.72" x 0.71"

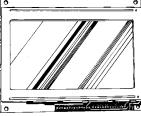


LED backlight. New unit, prepped with 9.5" ribbon cable terminated with standard 14 position (7 x 2) female socket connector. Includes hook-up sheet.

CAT# LCD-69 \$12.50 each

256 X 128 LCD PANEL

Hyundai # HG25504NG-01. 5.8" x 4.58" graphic display module with SED1330F onboard controller. Viewing area is 5" x 2.75.



STN gray positive type display. 5Vdc logic. 18 Vdc LCD voltage. Includes hook-up diagram.

CAT # LCD-58 \$18.50 each

See 5.5" Video LCD page 41

See LCD Serial Interface ICs page 89

	LIGHT EMITTING DIOD	DES (L	ED)		
STANDARD T-1 3/4 (5mm)	Color Description RED - diffused Special Quantity Pricing! GREEN - diffused YELLOW - diffused GREEN - water clear 500 mcd - high brightness	CAT# LED-1 LED-2 LED-3 LED-33	10 for \$1.00 10 for \$1.50 10 for \$1.50 4 for \$1.00	100 .07 .12 .12 .20	1000 .04 .10 .10 .15
ULTRA- BRIGHT	New, lower prices on these ultra-bright, wide vi 5mm (T 1-3/4) LEDs. Improved brightness and Water-clear in off-state.				
T-1 3/4 (5mm)	SPECIAL - RED - water clear - 2200 mcd RED - water clear 3000 mcd BLUE - water clear 1500 mcd GREEN - water clear 3000 mcd WHITE - water clear 3000 mcd YELLOW - water clear 3000 mcd AQUA - water clear 1500+ mcd	LED-43 LED-42 LED-74 LED-57 LED-75 LED-72 LED-77	3 for \$1.00 2 for \$1.00 \$2.85 \$3.30 \$2.75 \$1.35 \$2.85	.25 .35 1.95 2.55 1.85 1.00 2.20	.18 .22 1.50 2.00 1.50 .85 1.85
5mm LOW PROFILE	RED - diffused AMBER - lights RED point source	LED-21 LED-24	12 for \$1.00 12 for \$1.00	.07 .07	.06 .06
MINIATURE T-1 (3mm)	RED - diffused GREEN - diffused YELLOW - diffused RED - point source GREEN - point source YELLOW - point source BLUE - point source Ultrabright WHITE - diffused Ultrabright	MLED-1 MLED-2 MLED-3 MLED-7 MLED-8 MLED-9 LED-59 LED-83	10 for \$1.00 10 for \$1.25 10 for \$1.25 10 for \$1.00 10 for \$1.00 10 for \$1.25 \$3.75 \$2.85	.08 .10 .10 .08 .08 .10 0 for \$30 2.00	.07 .08 .08 .07 .07 .08).00
SUB-MINI RED AXIAL LED	Rohm # SLN-210VTT12. Red, 0.07" diameter point- Water-clear in off-state. Ammo-pack packaging. CA 10 for \$ 1.00 • 100 for \$ 8.00 Ammo-pack box of 2	T # LED-81	0.00 (\$ 0.04 ea	a)	.
FLASHING LEDS	Built-in flashing unit 3 - 5 Vdc operation T-1 3/4 (5mm) RED - diffused High Brightness T-1 3/4 (5mm) GREEN - diffused T-1 3/4 (5mm)YELLOW - diffused SPECIAL - RED T-1 3/4 - water clear T-1 (3mm) RED - diffused T-1 (3mm) GREEN - diffused T-1 (3mm) YELLOW - diffused	LED-4 LED-4G LED-4Y LED-84 LED-72R LED-72G LED-72Y	2 for .90 .50 .50 3 for \$1.00 .65 .75	.40 .45 .45 .25 .55 .65	.30 .40 .40 .18 .45 .55
BI-COLOR T-1 3/4 (5mm)	RED / GREEN diffused Two leads. Reverse polarity to change color. Yellow	<u>CAT#</u> LED-6 on AC.	<u>1-99</u> .50	<u>100</u> .45	<u>1000</u> .35
	RED / GREEN diffused Three leads. Center cathode. Milky-white off-state.	LED-63	.35	.29	.25
	GREEN / YELLOW Three leads. Milky-white off-state.	LED-78	.15	.10	.06
BI-COLOR T-1 (3 mm)	RED/GREEN diffused Three leads. Center cathode. Milky-white off-state.	<u>CAT#</u> LED-67	<u>1-99</u> .35	<u>100</u> .29	<u>1000</u> .25
	YELLOW/GREEN diffused Two leads. Bent leads.	LED-66	.20	.15	.09
INFRARED LEDS	T 1 3/4 EMITTER, clear lens T 1 3/4 EMITTER, Siemens# SFH484-1. Light purple epoxy lens. TO-18 EMITTER	CAT# ILED-8 ILED-20 TIL-31B	3 for \$1.00 3 for \$1.00 3 for \$1.00	.20 .25 .20	.14 .18 .15
8 mm JUMBO LEDS		Sanyo # SL s. Two LED ce. Clear in	P-5111A-378. elements light off-state.		
3 mm RED LED INDICATOR ASSEMBLY	Dialco # 558-010 polycarbonate m mounting hole. 8" CAT # LED-73 50¢ each • 10	nounting clip	fits holes. 0.1 Operates on 2	56" diar	neter

5MM BLUE LED SPECIAL



High-brightness blue LED. 1000 MCD. Water-clear in off state. Special price.





100 for \$1.15 each • 1000 for 95¢ each

5MM RED LED ASSEMBLY W/ 5 FOOT WIRE LEADS

5mm (T 1 3/4) high-brightness red diffused LED in black mounting clip. 5 ft wire leads with 2 conductor socket connector. Mounting clip fits 0.29" diameter hole and has 0.37" dia bezel.



CAT # LED-85 65¢ each • 100 for \$ 40.00

5MM GREEN DUAL LED, RIGHT ANGLE

PC pins on 0.1" centers. Dual T 1 3/4 diffused.

CAT# LED-68 10 for \$1.00 • 100 for 9¢ each • 1000 for 8¢ each





LED MOUNTING HARDWARE

Black plastic clips allow snap-in mounting of standard size LEDs.

CLIPS FOR T 1 3/4 (5 mm) LEDs

2 PIECE HOLDER Mounts in 6.3 mm hole.

1 PIECE HOLDER Mounts in 8 mm hole

1 PIECE HOLDER Snap mounts into 6 mm hole

CAT# 100 1000 HLED-4 10 for \$1.20 0.08 0.09HLED-3 2 for .90 0.36 0.30

HLED-6 2 for .70 0.25 0.18

CLIPLITE HOLDERS FOR T 1 3/4 LEDS

Colored polycarbonate lens increases brightness and viewing angle with either diffused or non diffused LEDs. Mounts in 0.25" hole in panels of 0.06" to 0.125" thickness.

GREEN YELLOW CLEAR

HLDCL-R 3 for 0.90 .25 .20 **HLDCL-G** 3 for 0.90 .25 .20 HLDCL-Y 3 for 0.90 25 20 **HLDCL-C** 3 for 0.90 25 20

CLIPS FOR T 1 (3 mm) LEDS

1 PIECE HOLDER Mounts in 4.5 mm hole.



Description

HLED-5 10 for \$1.00 .07 .08

10-99

100+

LED DISPLAYS

See 7-Segment LED Drivers page 79

CAT#



7 SEGMENT DISPLAYS

Char Ht. DIP Socket Color

0.3"	14 pin	Red	C.C. Single Digit	SDC-30	0.75	0.60	0.45
0.3"	16 pin	Green	C.A. Single Digit	SDA-19	0.75	0.60	0.45
0.36"	10 pin	Red	C.A. Single Digit	SDA-37	0.75	0.60	0.45
0.36"	10 pin	Red	C.C. Single Digit	SDC-36	0.75	0.60	0.45
0.56"	24 pin	Red	C.A. Dual Digit	TDA-50	0.75	0.65	0.50
0.56"	24 pin	Red	C.C. 3 Digit	TDC-51	1.00	0.90	0.80
0.56"	24 pin	Green	C.A. Dual Digits	TDA-56	0.75	0.65	0.50





DIP Socket	Color	Description	CAT #	1-9	10-99	100+
20	Red	10 segment	BG-10	1.50	1.25	1.00
20	Green	10 segment	BG-10G	1.50	1.25	1.00
20	Yellow	10 segment	BG-10Y	1.50	1.25	1.00

LED TESTER

Pocket-size led tester. Makes it easy to check functionality, color, brightness and uniformity. Plug any leaded LED into one of 12 positions on the socket strip to test at current ratings from 2-50ma. The seven middle positions on the strip are set at 10 mA allowing comparison of LEDs in those spaces. Requires 9 v battery (not included). CAT# LT-100 \$8.95 each

CHEAP (yet effective) LED FLASHER

The simplest electronic flasher ever. A red 5mm LED with flasher chip is attached to a battery snap that snaps onto a 2 AA cell battery holder (included). Will flash for months on a set of batteries.

Flash rate, approximately 120 flashes per minute. Batteries not included.

CAT# FSH-10 \$1.00 each 100 for 70¢ each • 500 for 60¢ each 1000 for 50¢ each

LAMPS

T-1 3mm Diameter Lamps

T-1 (3MM) w/ BARE WIRE LEADS

CAT# **LP-715** 2/\$1.00 \$40.00 5 Volt 115 ma 10 Volt 15ma LP-7218 2/\$1.00 \$40.00 14 Volt 40 ma LP-23 2/\$1.00 \$40.00

T-1 (3MM) w/ INSULATED WIRE LEADS

1.5v @ 40 ma. 10" leads.

CAT# LP-3 2 for \$1.00 • 100 for 40¢ each 3v @ 55 ma. 10" leads.
CAT# LP-4 2 for \$1.00 • 100 for 40¢ each

14v @ 45 ma. 10" leads.

CAT# LP-6 2 for \$1.00 • 100 for 40¢ each

12v @ 60 mA. 6" leads.

CAT# LP-10 2 for \$1.00

100 for 35¢ each • 1000 for 28¢ each

16v @ 80 ma. 3" leads.

CAT # LP-16 3 for \$ 1.00

100 for 25¢ each • 1000 for 15¢ each

T-1 3/4 5mm Lamp w/ Leads

24 Volts @ 130 mA. 5 mm dia. (T 1 3/4) incandescent lamp. Molded black plastic mounting clip with bayonet-type flange fit 0.31" dia. mounting hole. 6" pigtail leads.

CAT# LP-195 4 for \$1.00 • 100 for \$18.00

3 Volt Lamps w/ 20" Insulated Leads

3 volt 80 ma miniature incandescent lamps. Operate on 3 - 6 volts. Bulb size: 0.15" (4mm) diameter x 0.47' (12 mm) long. CAT# LP-60 4 for \$1.00 • 100 for \$20.00



SPECIAL - 14V 330 MA LAMP with WIRE LEADS

GE # 193. T 3 1/4 size, 0.4" dia. x 1" long lamp with bare 0.7" wire leads. 14 Volts @ 330 mA. Large quantity available. CAT # LP-193 4 for \$ 1.00 100 for \$ 18.00 • 1000 for \$ 100.00

8V 150 MA LAMP

8 VOLT, 150 MA with insulated wire leads. T 3 1/4 size, 0.4" diameter lamp with 9" leads. **CAT # LP-62** 4 for \$ 1.00



100 for 16¢ each • 1000 for 12¢ each

T-1 (3MM) 5.5 Volts 0.060 Amps CAT# LP-550 5 for \$1.00



100 for \$15.00 • 1000 for \$100.00

BLUE 5 VOLT PC MOUNT LAMP

SPECIAL #550 MINI-FLANGE BASE

T-1, 3 mm lamp with a blue filter. 5 Volts@ 44 mA. Mounted on a plastic base. 0.275" x 0.169" footprint. 0.28" high overall. PC leads on 0.2" centers, crimped for snap-in mounting.

CAT # LP-9 4 for \$ 1.00 • 100 for \$ 15.00

Automotive Wedge-Base Lamps

T 3 1/4, 1" X 0.43" diameter, size.



VOLTS mΑ CAT# PRICE 100+ 14 330 **LP-194** 2 for \$1.00 .40 14 190 **LP-161** 2 for \$1.00 .40 LP-73 .23 14 80 3 for \$1.00 500 for 18¢ each • 1,000 for 11¢ each

120V, 15W CANDELABRA BASE LAMP

0.97" dia. x 1.2" high spherical bulb. 0.46" dia. candelabra screw base.

CAT # LP-197 2 for \$1.00

50 for 35¢ each 200 for 30¢ each



MINIATURE BAYONET **BASE LAMP**



TRADE	VOLTS	AMPS	CAT#	PRICE	100+
47	6.3	.150	LP-47	2 / \$1.00	45¢
1813	14.0	.100	LP-1813	2 / \$1.00	45¢
1815	14.0	.200	LP-1815	2 / \$1.00	45¢
1819	28.0	.040	LP-1819	2 / \$1.00	45¢

T - 1 3/4 5 mm Diameter Lamps

T - 1 3/4 BI-PIN LAMP



VOLTS .080 LP-7382 2 for \$1.00 100 for \$45.00 14.0 28.0 .040 LP-7387 2 for \$1.00 100 for \$45.00

T-1 3/4 MIDGET FLANGE LAMP



VOLTS AMPS CAT# .040 LP-345 2 for \$1.00 100 for \$45.00 6.0 28.0 .040 LP-327 2 for \$1.00 100 for \$45.00

LARGE BAYONET BASE LAMPS

#67 lamp 13.5 Volts, 0.59 Amps. Single contact, large bayonet base lamp. CAT # LP-67 \$1.00 each • 10 for \$8.00

FUSE LAMPS



Popular lamps which are the same size as a 3AG 1/4" X 1 1/4" (AGC) fuse.

6 VOLTS

CAT# LPFS-6 75¢ each 10 for \$7.00

8 VOLTS

CAT# LPFS-8 \$1.00 each 10 for \$8.50

12 VOLTS

CAT# LPFS-12 75¢ each 10 for \$7.00

NEON LAMPS

NEON INDICATOR 120 VOLT

Good looking neon indicator RATED: 120 volts @ 1/3 watt . Mounts in 5/16" hole. Red lens with chrome ring. CAT# IND-100 75¢ each 10 for \$7.00 • 100 for \$65.00

NEON LAMP

100 for 15¢ each

Ne-2 style neon lamp. Operates on 115 Vac when used with a dropping resistor. 0.23" diameter x 0.72" long. CAT# NL-2 20¢ each



Page 6



Well-made assembly with NE-2 neon lamp, 100K resistor and 6" long pigtail leads, all connections covered with heat-shrink tubing. Stripped and tinned, ready to operate on 117 Vac.

CAT# LPN-4 5 for \$1.00 • 100 for \$17.00

HALOGEN LAMPS

MR-11, 12 VOLT 35 WATT

General Electric
Q35MR11/ NSP(FTE)
MR-11 quartz halogen lamp.
12 Volt, 35 Watt. 1.38" diameter
Multi-Mirror™ lamp. 0.15" pin spacing.
CAT # HLP-350 \$3.50 each • 10 for \$30.00

MR-16, 12 VOLT 35 WATT

General Electric
Q35MR16C/CG
MR-16 quartz halogen
lamp. 12 Volt, 35Watt,
12 degree beam. 1.975" diameter
multi-faceted reflector with cover glass.
CAT # HLP-351 \$3.50 each • 10 for \$30.00

MR-16, 50 WATT FLOOD LAMP

Gilway Technical Lamp # L521
Bi-pin base halogen lamp.
12 Volt, 50 Watt flood lamp.
13 degree beam angle. 4,000 hours.
1.97" dia. x 1.46" deep (excluding pins).
0.2" pin spacing. CAT # HLP-51
\$ 3.50 each • 10 for \$ 30.00

MR16, 50 WATT FLOOD LAMP

Bi-pin base halogen lamp.
12 Volt, 50 Watt flood lamp with a front glass lens. 1.97" dia. x
1.46" deep. 0.2" (5mm) pin spacing.

CAT # HLP-50 \$3.50 each • 10 for \$30.00

MR-16, 12 VOLT 75 WATT

General Electric EYJ/CG Q75MR16/ NFL/ CG MR-16 quartz halogen lamp. 12 Volt, 75 Watt, 25 degree beam. 1.975" dia. Multi-Mirror™ lamp with cover glass. 0.2" pin spacing. CAT # HLP-751 \$3.50 each • 10 for \$30.00

120 VOLT 300 WATT HALOGEN LAMP



Ushio # TWJ. 0.32" diameter x 4.61" long halogen lamp. Recessed contacts on both ends of lamp. Commonly used in square and rectangular floodlights. **CAT # HLP-300** \$2.25 each 10 for \$2.00 each • 100 for \$1.50 each

MINI-HALOGEN LAMP WITH WIRE LEADS

14 Volt, 3 Watt halogen lamp with wire leads. T 1 3/4, 5mm diameter x 12mm long. 0.8" long wire leads. CAT # HLP-405 \$1.20 each

LAMP HOLDERS

MINI BAYONET LAMP HOLDERS

For use with #44, 47, 1815 etc... standard mini-bayonet base lamps.



CAT# LHL-36 2 for \$1.00





LARGE BAYONET LAMP HOLDERS

For single contact 0.6" dia. bayonet base lamps.

4" insulated wire lead.

CAT# LHL-34 2 for \$1.00



SOCKET FOR T 1 1/2 WEDGE BASE LAMP

JKL # 2967-22-120-BLA. Fits 5mm glass wedge base lamps. Socket has 4.5" flying leads. **CAT# LS-3** 4 for \$1.00 100 for 20¢ each • 1000 for 15¢ each



12 VOLT COURTESY LAMP ASSEMBLY

Ford Motor Co.# DOZB-13707C. 12 Vdc, 0.66A cylindrical lamp with wire loop connections at each end. 1.6" long x 0.36" dia.

Mounted in white plastic holder with 1.37" metal mounting bracket. Nice bright light. Ideal for control and panel or display lighting. CAT# LMP-4 75¢ each

12V INDICATOR LAMPS

12 Vdc @ 50 mA lamp assemblies. Lens is 0.73" square x 0.5" high. Threaded bushing mounts in 0.58" dia. hole up to 0.2" thick. Solder loop terminals.

color	Cat#	each	10+
RED	LMP-12R	\$ 1.00	75¢
GREEN	LMP-12G	\$ 1.00	75¢
AMBER	LMP-12A	\$ 1.00	75¢
BLUE	LMP-12B	\$ 1.00	75¢
CLEAR	LMP-12C	\$ 1.00	75¢

MINIATURE CCFT LAMPS

Removed from new LCD backlights.

9" x 2.6 MM DIAMETER LAMP

In white plastic shade, 9.5" x 0.39" x 0.27."

Directs light in one direction. Shade is easily removable. With wire leads and two pin connector. Leads extend 3.5" beyond end of lamp. CAT # BF-279 \$2.50 each • 10 for \$2.00 each

DUAL LAMPS 12.5" x 2.6 MM DIA.

Two CCFT lamps in a metal shade. Shade directs light in one direction. The lamps are parallel to each other, approximately 2mm apart, with rubber end caps holding them together. The lamps are easily removable from the shade assembly, however extreme care must be used to separate lamps from the rubber caps. For maximum intensity and to avoid damage to the lamps, use lamps as mounted. Shade is 13.7" x 0.35" x 0.26". Wire leads extend 3.5" beyond end of assembly.

CAT# BF-262 \$4.50 ea. • 10 for \$3.75 ea.

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JKL MINIATURE FLUORESCENT AND UV FLUORESCENT LAMPS

Miniature CCF (Cold Cathode Fluorescent) lamps in a variety of sizes. Ideal lighting for controls, models, LCD backlighting and experimentation. The narrow spectrum UV lamps (blacklights) are great for mineral display, money verification and other special effects applications. Long life. Low power consumption. Operate on 12 Vdc using appropriate inverter.



WHITE FLUORESCENT LAMPS

<u>Diameter</u>	<u>Length</u>	CAT #	<u>Price</u>
3 mm	100 mm	BF-3100	\$12.50
3 mm	160 mm	BF-3160	\$13.75
5 mm	200 mm	BF-5200	\$15.00
3 mm	228 mm	BF-3228	\$15.00

SPECIAL PURCHASE! MINI-CCF LAMP

3.2 mm diameter X 250 mm long. White. JKL BF3250-20B

CAT# BF-3250

\$4.95 each • 100 for \$400.00



COLORED FLUORESCENT LAMPS

Lamps have two leads at each end. Use one or both leads for connection.

6 mm diameter X 165 mm length

<u>Color</u>	CAT #	<u>Price</u>
Orange	BF-61650	\$5.50
Green	BF-6165G	\$5.50
Blue	BF-6165B	\$5.50

UV Fluorescent Lamps (ultraviolet)

Diameter	<u>Length</u>	CAT #	Price
3 mm	25 mm	UV-325	\$8.25
3 mm	50 mm	UV-350	\$8.50
3 mm	100 mm	UV-3100	\$10.75

12 Vdc INVERTER

1.75" x 0.79" x 0.5" Will drive one or two lamps. Includes spec/hook-up sheet.



MINIATURE 12 Vdc INVERTER

2.2" x 0.25" x 0.2". Will drive one lamp only. Includes spec/hook-up sheet **CAT # BXA-12576** \$10.95 each

INVERTER, 5 VDC INPUT

TDK-2090. Inverter for small to medium CCFT lamps. Operates on 3-5 Vdc. No official specs available at REDUCED this time. Our tests indicate that it lights lamps of 250mm length or less. Module is 2.17" x 1.1" x 0.4" high. PC pins on 2" x 0.84" centers. Large quantity available.

\$3.75 each CAT# INV-7

10 for \$3.25 each • 100 for \$2.50 each

ELECTROLUMINESCENT EXPERIMENTER KITS

Electroluminescent lamp strips are used for backlighting control panels, computer and pager displays, wristwatches and hundreds of other items. When voltage is applied they glow gently and produce almost no heat. EL strips are thin and easy to cut and bend. Ideal for model builders, safety lighting and other special effects lighting.

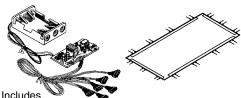
EL KIT

This kit provides everything you need to

start using EL strips. Includes one white 1.7" x 3.75" EL strip with six sets of electrodes, a power supply, battery holder, switch, an assortment of color overlays and instruction book. Requires 2 AAA batteries (not included).

CAT # EL-340 \$ 22.95 each 5 or more \$ 21.95 each

JUMBO EL KIT



Includes a 4" x 6" EL panel

with 14 electrodes. The power supply has 6 sets of connectors and can power up to 6 panels at the same time. Requires 3 AA cells (not included). Includes instructions.

CAT # EL-2504 \$ 34.95 each

ELECTROLUMINESCENT CHASER

KIT Make animated miniature neon signs and light

displays using thin, flexible,

cool electroluminescent

strips. Pre-programmed with 32 different sequential patterns. Each pattern has five channels, meaning you can light up to five strips. Comes with one 3.75" x 1.7" strip with six connectors which can be cut into smaller pieces to make shapes and letters. Includes, inverter/chaser module, EL strip, color overlays, battery holder for 3 AAA cells and instructions. Batteries not included.

CAT # EL-2502 \$ 28.95 each

INVERTER FOR EL PANELS AND **STRIPS**

Input: 12 Vdc. Output: 90 Vac Inverter designed to light larger electroluminescent (EL) panels and strips up to 100 sq. in. surface

area. 2.42" x 1.39" x 1.17" high. 1 foot pigtail leads.

CAT# INV-8 \$5.00 each • 10 for \$4.75 ea.

SWITCHES

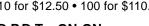
(brackets) indicate momentary position

SUB MINIATURE TOGGLE

0.2" diameter threaded bushing. 0.4" long bat handle.

S.P.D.T. ON-ON

Rated: 3 amp @ 125 Vac. Solder lug terminals. CAT# SMTS-4 \$1.35 each 10 for \$12.50 • 100 for \$110.00



D.P.D.T. ON-ON

Rated: 3 amp @ 125 Vac. Solder lug terminals. CAT# SMTS-8 \$1.75 each 10 for \$15.50 • 100 for \$135.00

MINIATURE TOGGLE

1/4-40 threaded bushing. 0.43" long handle unless otherwise noted

S.P.D.T. ON-ON

RATED: 6 amp @ 120 Vac. Solder lug terminals.CAT# MTS-4 \$1.00 each 10 for \$9.00 • 100 for \$75.00



S.P.D.T. ON-ON

RATED: 6 amp @ 120 Vac. P.C. terminals. CAT# MTS-4PC \$1.00 each 10 for \$9.00 • 100 for \$80.00 1000 for \$700.00



S.P.D.T. **ON-OFF-ON**

RATED: 3 amp @ 120 Vac Center off. Solder lug terminals. CAT# MTS-5 \$1.00 each 10 for \$9.00 • 100 for \$80.00



S.P.D.T. ON-OFF-ON WIRE WRAP PINS

Augat/Alcoswitch # AE103MD1W4B Center-off position. Contacts rated 5 Amps @ 125 vac. Short toggle handle, 0.282" long. 0.232" diameter non-threaded bushing. Thermoplastic case. Four-level wire wrap pins. CAT# MTS-50WW \$1.00 ea. • 25 for \$ 22.50



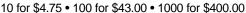
S.P.D.T. ON-OFF-ON NON-THREADED BUSHING

P.C. style Center off. RATED: 5 amp @ 120 Vac. **CAT# MTS-50PC** 50¢ each 10 for \$4.00 • 100 for \$30.00



S.P.D.T. ON-OFF-(ON)

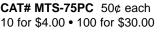
NON-THREADED BUSHING Rated: 5 amp @ 120 Vac. Center-off P.C. style. Momentary one direction only. CAT# MTS-70PC 50¢ each





S.P.D.T. ON-OFF-(ON)

NON-THREADED BUSHING RATED: 5 amp @ 120 Vac. Momentary one direction only. Handle measures 1".





D.P.D.T. ON-ON

RATED: 6 amp @ 120 Vac. Solder lugs. CAT# MTS-8 \$1.25 each 10 for \$10.50 • 100 for \$85.00



S.P.3.T. ON-ON-(ON)

JBT Switch. Single-pole, three position miniature toggle switch. On in all three positions. Momentary in one position. 0.24" plain, non-threaded bushing. Right-angle pc terminals.



CAT# MTS-85RT \$1.75 each

D.P.D.T. ON-ON NON-THREADED **BUSHING. CLIP MOUNT**

C & K # E201. Contacts rated 0.4VA. Non-threaded 0.24" dia, bushing with flatted sides can be spring-clipped onto panel(spring-clip included). Right angle pc mounting leads. CAT # MTS-80RT

\$1.00 each • 10 for \$8.50 • 100 for \$70.00

D.P.D.T. ON-ON

RATED: 6 amp @ 120 Vac. PC Mount. CAT# MTS-8PC \$1.00 each 10 for \$8.50 • 100 for \$70.00



D.P.D.T. ON-ON **NON-THREADED BUSHING**

P.C. style. RATED: 5 amp @120 Vac. Extra long flat lever. Handle measures 1" long. CAT# MTS-85PC 75¢ each 10 for \$7.00 • 100 for \$65.00



S.P.3.T. ON-ON-(ON)

ALCOSWITCH# MTA206TA Single-pole, 3 position. Momentary in one position. Rated 6 amps @ 125 Vac. Solder lug terminals. Requires external CAT# MTS-81 iumper.



\$2.00 each • 10 for \$18.50

D.P.D.T. ON-OFF-ON

RATED: 3 amp @ 120 Vac Threaded bushing. Solder lug terminals. CAT# MTS-12 \$1.60 each

10 for \$13.00 • 100 for \$100.00

10 for \$13.00 • 100 for \$100.00



D.P.D.T. ON-OFF-ON

NON-THREADED BUSHING. RATED: 5 amp @ 120 Vac. P.C. terminals. Center-off. CAT# MTS-120PC \$1.50 each



STANDARD TOGGLES

Switches have 15/32" threaded bushings.

S.P.D.T. ON-OFF-ON

S.P.D.T., center-off toggle switch. 10 Amp, 250 Volt contact rating. Standard toggle handle and 15/32" threaded bushing. Solder terminals.



CAT # STS-42 \$ 1.50 each

D.P.D.T. ON-OFF-ON

15 AMP D.P.D.T. toggle. Standard toggle handle. 15/32" threaded bushing. UL listed.



CAT# STS-8 \$2.50 each

DPST TOGGLE SWITCH

Japan Switch # ST206K Standard D.P.S.T. toggle switch. 6A 125 Vac. 15/32" threaded bushing. Solder terminals.

CAT # STS-811 \$ 1.50 each





LIGHTED ROCKER SWITCHES

120 VAC LIGHTED ROCKER

S.P.S.T. neon-lighted rocker switch.
Contacts rated 20 amps @ 125 vac.
Black bezel is 1.32" x 0.61" and has a white dot marking on-position.
Red rocker. Switch snap-mounts into 1.1" x 0.5" cut out. Solder or qc terminals.

CAT # LRS-17 \$1.25 each • 100 for \$95.00

120 VAC LIGHTED ROCKER

Carling. D.P.S.T. neon-lighted rocker switch. Black bezel and rocker with red rectangular light in top half of rocker. Bezel is 1.16" x 1.25". Contacts rated 10 Amps @ 120 Vac. Snap-mounts in 1" square cut out. QC or solder terminals.

UL, CSA. CAT # LRS-18 \$ 1.75 each

LED LIGHTED ROCKER SWITCH, SPST

SMK # JWZ1120-0203.
S.P.S.T. rocker switch
rated 6 Amps @ 125 Vac.
Green LED indicator in
rocker. LED requires a ballast
resistor, dependent on operating voltage.
Snap-mounts into 0.5" x 0.75" panel cutout.
0.187" Faston or solder terminals.

CAT# LRS-20 \$1.00 each

ROCKER SWITCHES

S.P.S.T. ROCKER SWITCH

Black rocker switch with 0.83" x 0.6" black bezel. White indicator dash on rocker. S.P.S.T. contacts rated 6 Amps, 125 Volt. Snap-mounts in 0.7" x 0.5" chassis cutout. Solder lugs. **CAT# RS-106**2 for \$1.00 • 100 for 35¢ each



Eaton # 5121A1E. Black bezel and rocker. Snap-mounts into 1.20" x 0.44" cutout. Rated 0.50 h.p. 16 Amps 125 Vac. 0.25" qc or solder terminals. CSA, UL, VDE.

CAT# RS-107 75¢ each

SPDT ROCKER, MOMENTARY BOTH DIRECTIONS

Arrow England B160611E. S.P.D.T. center-off, momentary both directions. Large matteblack rectangular rocker measures 1.81" x 1". Snap mounts into 1" x 0.5" hole. Rated 10 amp 250 vac. 0.25" q cor solder terminals. UL.

CAT# RS-108 \$1.25 each

S.P.D.T.(ON)-OFF-(ON) MOMENTARY ROCKER C&KE105 情

SPDT, center-off, momentary both directions. Rated 0.4 Va. Black rocker is 0.67" X 0.365". Right angle pc pins. **CAT# RS-23** 50¢ each

THINLINE ROCKER SWITCH

Arcolectric # H8800VAWB132W
S.P.S.T. thinline rocker switch. Rated
15 Amps @ 250 Vac, Tested for 75 Amp
inrush current. Snap-mounts into 0.27" x
0.69" panel cutout. Black rocker with 0 – I
legend in white. Opaque white body and bezel. 0.19"
qc or solder terminals. UL, CSA.
CAT# RS-102 2 for \$1.00

DPDT MINI ROCKER SWITCH

C & K T series D.P.D.T. miniature rocker switch. Contacts rated 3 Amps @ 120 Vac. Right-angle, pc mount. Black rocker is 0.58" x 0.3" x 0.25" thick. Body is 0.32" x 0.32" x 0.39."

CAT # RS-104 65¢ each • 10 for \$5.00

S.P.S.T. 16 AMP

Carlingswitch. Black bezel and rocker.
Red indicator on rocker is visible in the on-position. Rated 16 Amps @ 125 Vac.
Snap-mounts in a 0.5" x 1" chassis cutout.
Solder terminals. UL, CSA.

CAT # RS-103 65¢ each • 100 for \$40.00

3PST, 6 and 15 AMPS

Eaton. Three pole, on-off rocker switch. One pole is rated 6 amps and two poles are rated 15 amps. Black bezel and black rocker with "ON" "OFF" in white letters. Snap-mounts into 0.75" X 1.5" rectangular chassis hole.

Overall dimensions: 1.44" X 1.33" X 1.57" deep. Quick-connect or solder terminals. UL and CSA listed.

CAT# RS-45 75¢ each

S.P.D.T. - MINI 10 AMP

Miniature S.P.D.T. rocker switch.
Contacts rated 10 Amps @ 125/250 Vac.
Ivory rocker and bezel. Snap-mounts into 0.8" x 0.53" rectangular cutout. UL, CSA.
Solder loop terminals. CAT# RS-74 2 for \$1.00

S.P.D.T. 16 AMP

CW Switch. Black rocker and bezel. Snap-mounts in 0.5" x 1.125" chassis cutout. 16 Amps @ 125 Vac. 3/4 H.P. Solder or 0.25" qc terminals. UL, CSA.

CAT # RS-101 75¢ each • 10 for \$6.50

D.P.D.T. CENTER-OFF

Russenberger. Flat black rocker and bezel. Rated 10 amps @ 250 Vac. Snap-mount in 1" X 0.88" rectangular hole. 3/16" quick-connect solder terminals.

CAT# RS-67 2 for \$1.00 10 for \$4.50 100 for \$40.00 • 1000 for \$350.00

D.P.D.T. MINI-ROCKERS

Carlingswitch. Rated 8 amps @ 125 Vac. Snap mount in 0.7" X 0.52" rectangular chassis hole. UL and CSA. Black rocker, white bezel,no lettering. **CAT #RS-61** 2 for \$1.00 • 100 for 35¢ each



DIP SWITCHES

3 POLE DIP SWITCH

Three - S.P.S.T. switches per unit **CAT# DWS-3** 3 for \$1.00

5 POLE DIP SWITCH

5 - S.P.S.T. switches per unit. **CAT# DWS-5** 4 for \$1.00

6 POLE DIP SWITCH

6 - S.P.S.T. switches per unit. **CAT# DWS-6** 2 for \$1.00

7 POLE DIP SWITCH

7 - S.P.S.T. switches per unit. **CAT# DWS-7** 4 for \$1.00

SNAP ACTION SWITCHES

LARGE BODY STYLE

15 AMP, SPST N.O.

Master Switch S.P.S.T., normally-open. Contacts rated 15 Amps @ 125 Vac. Body size, 1.9" x 0.64" x 0.64." Mounting holes on 1" centers. Solder or 0.25" qc terminals. UL, CSA. CAT # SMS-194 \$ 1.25 each

STANDARD BODY STYLE BODY SIZE: 3/8" X 5/8" X 1 1/8"

CHERRY D40 W/ SIM ROLLER LEVER

S.P.D.T. Rated 1 Amp @ 125 VAC. Lever with simulated roller tip extends 0.4" beyond end of switch. 0.187" qc or solder terminals. UL, CSA.

CAT # SMS-186 \$1.00 each

CHERRY D40 W/ LEVER

S.P.D.T. Rated 1 Amp @ 125 VAC. Lever extends 0.43" beyond end of switch. 0.187" qc or solder terminals. UL, CSA.



INTERLOCK SWITCH

Omron 1VAP2-2. SPDT switch rated 15A, 1/2hp @ 125/250VAC. Interlock assembly designed to disable equipment when access panels or doors are opened. Overall size: 1.81" x 1.69" x 0.5." Threaded holes on front and side. 0.187" QC terminals. UL/CSA.

CAT # SMS-193

\$ 2.00 each • 100 for \$ 1.25 each

CHERRY D43

S.P.D.T. with roller positioned above switch actuator. Rated 5 amps @ 125/250 vac. Switch body: 1.1" x 0.63" x 0.375". Solder or qc terminals. UL\CSA.

CAT# SMS-150 \$1.25 each • 10 for \$10.00

MICRO# V3L141D94

SPST, normally open. Short lever with roller. Rated 4 amps. 1/4" quick-connect terminals. UL, CSA CAT# SMS-68 \$1.25 each



S.P.D.T. PREPPED W/ WIRES

Cherry D44. Rated 10 Amps @ 125/250 Vac. New snap-action switch prepped with two wires with quick-connect terminals. QC or solder terminals. UL, CSA.

CAT# SMS-168 85¢ each

S.P.S.T., N.O., 15 AMP

Microswitch # V7-1C27E9 S.P.S.T., normally-open. Rated 15A @ 125/250 Vac. 0.25" qc or solder terminals. UL, CSA. **CAT # SMS-175** \$1.00 each 10 for \$ 8.50 • 100 for \$ 65.00

SMALL SIZE BODY

SUB-MINI SNAP ACTION SWITCH | Microswitch # 21SX39-T. S.P.D.T.

sub-miniature switch with button actuator and gold-plated turret terminals. Rated 7 Amps @ 250 Vac. Body size: 0.5" x 0.2" x 0.35" high (excluding plunger and terminals). UL, CSA. **CAT # SMS-192** \$1.25 each

SUBMINIATURE MICRO SWITCH W/ LEVER

Micro # 311SX91-H330. Subminiature S.P.D.T. snap-action switch rated 5 vdc 200 ma. Lever is bent upward and curved, extends approximately 0.30" beyond switch when straightened. Body size: 0.58" long x 0.18" x 0.45" high. Short p.c. pins (0.08"). **CAT# SMS-189** 50¢ each

MICRO # UM10E20E01

S.P.D.T. miniature snap-action switch with lever. Contacts rated 0.1A @ 250 Vac. Switch body is 0.77" x 0.39" x 0.25" thick. Lever with simulated roller tip extends 0.14" beyond end of switch. PC terminals can be wrapped and soldered. UL, CSA.

CAT# SMS-182 \$1.00 each

SWITCH WITH FLEXI-LEAD

Microswitch # SM120S.
S.P.D.T. switch rated 3 Amps @
250 Volts. Body is 0.8" x 0.25" x 0.4."
Lever with semi-rolled end extends just past end of switch body. Switch is soldered onto a flexible conductive lead that extends 4" and can be desoldered. UL, CSA.

CAT # SMS-190 50¢ each

DUAL SNAP-ACTION SWITCH ASSEMBLY WITH FLEXI-LEAD

Assembly consists of two Microswitch # SM120S switches, side-by-side, on a metal bracket. Switches are S.P.D.T. rated 3 Amps @ 250 Volts. They have levers with semi-rolled tips that extend just past end of switch body. Both switches are connected to a desolderable flexible conductive lead. Assembly also has a roller lever, unrelated to the switches. Each switch is 0.8" x 0.25" x 0.4" and are UL and CSA.

CAT # SMS-191 \$1.00 per assembly

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SUBMINIATURE SNAP-ACTION SWITCH W/ ROLLER LEVER

Omron J-7 or equiv. with JX-222 roller S.P.D.T. subminiature snap-action switch rated 7 Amps @ 125 Vac. Included with each switch, in a separate package, is a lever with a roller tip. The lever extends 0.28" beyond the end of the switch. Switch body without lever is 0.51" x 0.20" x 0.43". Turret terminals. UL, CSA. CAT # SMS-174 \$1.25 each

S.P.D.T. W/ ROLLER LEVER

Omron # SS-5GL2. S.P.D.T. miniature snap-action switch. Rated 5 Amps @ 125 Vac. Body size: 0.78" x 0.40" x 0.25." Lever with roller tip extends 0.1" beyond end of switch. Solder-loop terminals. UL, CSA.

SNAP-ACTION SWITCH with LEVER

Unimax # LMGHC. S.P.D.T. miniature snapaction switch. Contacts rated 5 Amps @ 250 Vac. Lever extends 0.365" beyond end of switch. Switch body is 0.78" L x 0.25" W x 0.51" high. Solder turret terminals. UL, CSA.

CAT # SMS-181 \$1.00 each • 10 for \$9.00

S.P.S.T., NORMALLY-OPEN SNAP-ACTION SWITCH

Cherry # DB2. SPST switch rated 10.1 A @ 250 V. Body size: 0.78" x 0.25" x 0.37" high. UL, CSA. CAT# SMS-167 2 for \$ 1.00

CHERRY DG1C-BJ07

S.P.D.T. Sub-miniature snap-action switch. Body size: 0.51" long X 0.255" high X 0.255" wide. Lever with ridged end simulates roller action. Rated 3 amps @ 125 Vac, 2 amps @ 30 Vdc. PC pins on 0.2" centers. Large quantity available. CAT# SMS-133 2 for \$1.00 100 for \$45.00 1000 for \$350.00

WEATHER PROOF SNAP-ACTION

Cherry E-73. S.P.D.T. sealed, watertight snap-action switch rated 0.1 Amp @ 125 Vac. Lever with roller tip extends 0.6" beyond end of switch. Body is 0.91" x 0.89" x 0.38". 10" 16 gauge leads. UL, CSA. CAT # SMS-179 \$2.00 each



ROTARY SNAP-ACTION SWITCHES

COUNTER-CLOCKWISE ACTION (USED)

Cherry E 53. S.P.D.T. Rated 0.1 Amp @ 125 Vac. Prepped with wire lead on the common terminal. UL and CSA CAT # CCW-9 \$ 1.25 each



COUNTER-CLOCKWISE

Cherry E51. S.P.D.T. 5 Amp, 125 Vac. Counter clockwise action. Prepped with 24" leads on the common and n.o. terminals. UL, CSA. CAT # CCW-10 \$2.50 each



SUB-MINIATURE PUSH BUTTONS

S.P.S.T. PC MOUNT

ALPS# SKHHAK409A. 0.25" square X 0.19" high. Leads on 0.15" X 0.25" centers. **CAT# PB-126** 4 for \$1.00 • 100 for \$22.50 500 for \$100.00 • 1000 for \$180.00

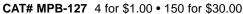
FSM SERIES TACTILE PUSHBUTTON

Augat/Alcoswitch FSM series 0.24" square miniature pc mount pushbuttons. SPST momentary, normally open. Beryllium copper contacts rated 50 mA @ 12 Vdc. PC lead spacing, 0.256" x 0.177". Plunger height 0.055"

CAT# FSM-4 4 for \$1.00 • 100 for \$22.50 500 for \$100.00 • 1000 for \$180.00

S.P.S.T. PC MOUNT

S.P.S.T. momentary, normally open. 0.48" square x 0.18" body. Plunger stands 0.3" above body. Four PC leads on 0.2" x 0.5" centers.



S.P.S.T MECHANICAL PUSHBUTTON

Omron # B3F-1022. SPST N.O. mechanical push button switch with a positive click action. 0.23" (6m) square x 0.20" (5mm) h. Switching capacity 5-24 vdc, 50 ma (resistive load). PC pins on 0.18" X 0.26" centers.

CAT # MPB-129 4 for \$1.00 100 for \$22.00 • 1000 for \$180.00

MOMENTARY PUSHBUTTON SWITCH, PC MOUNT

Schurter # MTG 1241.1052 S.P.S.T., normally-open, momentary pushbutton switch for pc mounting. 0.5" square x 0.15" high. PC pins on 0.2" centers (diagonal). Positive snapaction feel. Rated 24 Vdc @ 50 mA. Black.

CAT# PB-122 3 for \$ 1.00 • 100 for \$ 25.00

SPST N.O. PUSHBUTTON, PC MOUNT

Omron # B3F-4050. S.P.S.T., N.O. mechanical pushbutton. Positive click action. 0.48" (12mm) square x 0.3" (7mm) high. Switching capacity 50ma @ 24 Vdc. PC pins on 0.2" x 0.47" centers. **CAT# MPB-130** 4 for \$1.00 100 for 22¢ each

PUSHBUTTON SWITCHES

S.P.S.T. MOMENTARY

Normally open switch with 1/4" bushing and plastic button. Ideal for most low current projects.

CAT# MPB-1 RED BUTTON

35¢ each • 10 for \$3.25 • 100 for \$30.00

BLACK BUTTON CAT# MPB-1B 35¢ each • 10 for \$3.25 • 100 for \$30.00

S.P.S.T. MOMENTARY RED PUSH-**BUTTON WITH 5 FT WIRE LEADS**

Terminated with 2-pin female connector (0.1" spacing). **CAT # MPB-16** 65¢ each 10 for \$6.00 • 100 for \$50.00



S.P.S.T. MOMENTARY, N.O.

Sub-mini SPST momentary switch. Normally open. Right-angle pc mounting. 0.1" dia. plunger. 0.18" plain bushing. Rated 20 VA. CAT # PB-82 2 for \$1.00



DPDT, PUSH-ON/ PUSH-OFF

Small, push-on/ push-off pc mount pushbutton switch. 0.31" square x 0.31" high. Gray cap 0.2" X 0.37". Plunger rises 0.5" above switch body. PC pins on 0.1" centers. Contacts, 0.1A @ 30 Vdc. CAT # PB-94 4 for \$1.00

100 for \$20.00 1000 for \$120.00

S.P.S.T. LED LIGHTED PUSHBUTTON

S.P.S.T., momentary, normally-open pushbutton switch for p.c. mounting. 0.23" square x 0.25" high white cap. Overall height of switch is 0.9." Base is 0.39" square x 0.47" high with PC leads in each corner and two plastic pins 3 for \$1.00 for stability. **CAT# PB-125** 100 for 25¢ each • 1000 for 19¢ each 2000 for 15¢ each



MINIATURE ILLUMINATED

Mountain Switch (Miyama Electric) # MS-800 / B2SFC. Good-looking miniature D.P.S.T. momentary pushbutton switch with red lens. Contacts rated 0.1 Amp @ 30 VDC. 0.55" square, matte-black bezel. 0.386" square red lens. Lamp operates on 12 - 28 Volts. Snap-mounts in a 0.5" square cutout. 0.95" behind panel depth. Solder-loop terminals. CAT # PB-100 \$1.75 each • 10 for \$16.00

PUSHBUTTON SWITCH

Judco model# J-188 SPST, push-on push-off, plastic pushbutton. Contacts rated 3 amps @ 125 Vac. Black body, actuator and panel nut. 3/8-27 threaded bushing. 4 1/2" stranded wire pigtails. **CAT# PB-21** UL listed.

75¢ each • 100 for \$60.00

EXCEPTIONAL DEAL ON KEYBOARD TYPE SWITCHES

These inexpensive SPST, pc mount push-button switches are priced to move. White plastic body and plunger; 4 pc pins two contacts and two supports. Body is 0.59" square. The unit stands 1.15" off of the pc board. No keycaps available, but they could be trimmed and used without caps. CAT# PB-49 10 for \$1.00 • 100 for \$8.00 • 1000 for \$ 60.00

SPST, N.O. PUSHBUTTON

McGill switch. SPST, normally-open momentary pushbutton. Rated 15 Amps @ 125 Vac. Standard 15/32" threaded bushing. 0.36" dia. pushbutton. 0.25" qc or solder terminals. UL, CSA. CAT # PB-106 \$1.50 each

S.P.D.T. PUSHBUTTON

Marquardt# 1843. - Push-On Push-Off. Rated: 6 amp @ 125/250 Vac. UL/CSA. Handsome 0.31" dia. black plastic pushbutton. 0.46" dia. threaded bushing. Chrome dress nut and standard back-up nut included. Switch body: 0.92" behind the bushing X 0.94" X 0.65". Solder loop or 0.2" q.c. terms. CAT# PB-18 85¢ each • 10 for \$7.50 • 100 for \$65.00

D.P.D.T. PUSH-ON / PUSH-OFF

White nylon plunger, 0.13" square. Solder or PC pin terminals. CAT# ISW-10 3 for \$1.00

SPST, ON/OFF PUSH-BUTTON

Arcolectric 1100 series. Push-on/ push-off single pole switch. Rectangular plastic body, 0.5" x 0.39" x 0.85" long, designed for custom mounting. Plunger extends 0.43" above body. Rated 125 mA @ 125 Vac. Solder-loop terminals. UL.

CAT# PB-103 3 for \$1.00 • 100 for \$25.00

PUSH-ON/ PUSH-OFF SWITCH

Kautt u. Bux # T85. S.P.S.T. push-on / push-off switch. Black. Rated 6 Amp, 250 Vac. Snap-mounts in 0.54" x 0.72" rectangular cutout. 0.187" quickconnect / solder terminals. UL, CSA.

CAT # PB-123 75¢ each 10 for 65¢ each • 100 for 50¢ each

PUSH SWITCH ASSEMBLY

Assembly includes POWER and RESET switches with caps and clear LED lens from Nintendo games. Switches are SPST. One is push-on/ push-off; the other is momentary, normally-open. The LED lens fits a T1 3/4 LED. Could be disassembled and used in other applications.

CAT# ISW-4 5 for \$1.00 100 for \$8.00 • 1000 for \$50.00

PUSHBUTTON & LED ASSEMBLY

Black plastic assembly with a S.P.S.T. momentary, normally open pushbutton switch and a T 1 3/4 (5mm) red led. 0.97" x 0.75" x 0.55" depth, with flanges extending 0.50" on both sides of housing. Four 3' wire leads, two for switch and two for led, terminate to a 4 pin (0.1 center) connector. For low current applications under 1 amp. CAT# PB-128 \$1.25 each

MINI DPDT MOMENTARY PUSHBUTTON

Alps # SPPJ621528. Miniature D.P.D.T. momentary push switch for pc board mounting. When mounted, plunger is parallel to pc board. Rated 0.2 Amps @ 12 Vdc. Ideal for signal switching applications. Switch body is 0.36" x 0.36" x 0.18" high. Plunger extends 0.38" from body. CAT # PB-528 5 for \$1.00 100 for \$15.00 • 1000 for \$100.00

SPDT MOMENTARY PUSHBUTTON

NKK # M2B-15. SPDT, pc mount momentary pushbutton switch. Rated 0.4VA @ 28 Volts. Good-quality switch with a crisp, snap-action response. Gold-plated right-angle pc leads. 0.2" dia. black pushbutton. 0.12" dia. metal plunger. \(\) Plain bushing, 0.21" x 0.24." CAT# PB-120 2 for \$1.00 • 100 for 35¢ each

JUMBO PUSHBUTTONS

Durable plastic S.P.D.T. momentary pushbutton switch frequently found in arcade games. Useful in any application requiring a large, rugged pushbutton switch. Button operates a 10 Amp snap-action switch. Plunger is 0.86" diameter. Bezel is 1.33" diameter. Threaded bushing is 1.1" diameter and will mount in panels up to 0.75" thick. Includes large plastic mounting nut. Available in two colors:

RED SWITCH CAT# PB-211 \$3.75 each BLACK SWITCH CAT# PB-216 \$3.75 each

MANUFACTURERS We Purchase Excess **Inventories** CALL, WRITE, E-MAIL or FAX your list

B.C.D. SWITCHES

7 POSITION ROTARY

BCD encoded rotary pushbutton switch. Has digits 0-6. Prepped with a 7" cable terminated with a 6 pin socket connector. Useful for SCSI chains. Snap-mounts into rectangular panel cutout, 0.56" x 0.47".

CAT # RDIP-12 \$1.00 each • 10 for \$7.50

10 POSITION ROTARY

10 position, BCD rotary switch.
Screwdriver adjust, slotted shaft.
0.43" x 0.28" x 0.4."high. 6 pc leads.

CAT # RS-109 2 for \$ 1.00 • 100 for 35¢ ea.

ROTARY SWITCH

1 POLE, 3 POSITION

Electroswitch # 205 9023. This is actually a custom-made two pole, 3 position switch with resistance built-into one of the poles. The pole without resistance is normal, however the contact rating is unknown. Brass 0.25" diameter flatted shaft and 3/8" threaded bush

0.25" diameter flatted shaft and 3/8" threaded bushing. Body is 0.85" x 0.56" x 0.68" behind the bushing depth. Solder loop terminals.

CAT # RS-95 \$1.00 each

MINIATURE LEVER SWITCH

S.P.D.T. (ON) OFF (ON)

Alps # SSCF2136LX. S.P.D.T., center-off miniature lever switch. Spring-action lever returns to center-off position. 0.49" x 0.43" plastic body. Lever extends 0.375" beyond switch. Mounting flange extends 0.24". Solder-loop terminals. Large quantity available.

CAT # LSW-1 4 for \$1.00 • 100 for \$20.00 1250 for \$150.00 (12¢ each)

SLIDE SWITCHES

DPDT MINIATURE SLIDE SWITCH

Body size: 0.61" x 0.3" x 0.48" deep including solder terminals. Mounting holes on 0.75" centers.

CAT # SSW-33 4 for \$ 1.00

100 for \$ 20.00 • 1000 for \$ 120.00

KEY SWITCHES

S.P.S.T. MOMENTARY-ON 🗣

Chicago Lock Spring-loaded key switch. Momentary-on position.

Key removable in off position only.

0.75" threaded bushing is 1" long. Below panel depth of switch including terminals is 1.85".

0.87" diameter chrome bezel. Hardware includes 1.07" diameter chrome trim bezel and mounting nut. Screw terminals.

CAT # KSW-16 \$3.50 each

2-POSITION, SPDT KEYSWITCH

C&K Y Series.
2 position,
S.P.D.T.
keyswitch.
Key removable in both
positions. Rated 4 Amps.
Prepped with 23" 3 conductor wire lead. Threaded
bushing fits 3/4" hole in panels up to 0.25" thick.
Length of body, behind panel is 0.75". Includes two
keys and speed-clip for attachment to panel. UL, CSA.

LOW PROFILE KEYSWITCH

C & K # P101133WM03NQ2.
High-reliability, S.P.D.T. keyswitch.
Key removable in one position. Rated
4 Amps @ 125 Vac. Flat-black nylon
bezel and body. Bezel dia. 0.875". Approximately 0.6"
behind-the-panel clearance. 0.75" diameter threaded
bushing with nut. Solder-loop terminals. UL, CSA.

CAT # KSW-22 \$ 2.75 each

KEY SWITCH / DRAWER LOCK SET

High-quality key switch and drawer lock set manufactured for Hewlett Packard. Both are keyed alike. Both switch and lock have attractive 0.87" diameter, brushed aluminum tapered bezel. Both have threaded bushings that fit 0.75" dia. holes. S.P.S.T. switch, key can be removed in both positions. The key switch will fit up to 0.9" thick panels and comes with a 0.5" high collar that can be used to raise it above the panel. The drawer lock fits panels up to 0.3" thick. Includes 2 keys and mounting clips.

CAT # KSW-19 \$4.00 per set

REED SWITCHES

S.P.S.T. NORMALLY OPEN REED SWITCH

Rated 1 Amp @ 50 Vdc. or 250 Vac. Hermetically sealed glass body is 1.4" long x 0.2" diameter. Lead length is 0.47".

CAT # RSW-14 2 for \$ 1.00

LEVER-ACTUATED REED SWITCH

Hamlin # 10-59600-054 S.P.S.T. normally-open reed switch with a spring lever. Ideal low-noise, low-operating force sub

for rotary snap-action switches and other limit switches. Composite plastic body and lever assembly. Body is 1.24" x 0.655" x 0.69." Two mounting holes approximately, 0.9" apart. Two 2.5" wire leads.

CAT# RSW-21 \$1.50 ea. • 100 for \$1.15 ea.

AUTO PIN SWITCHES

Standard 1.93" long pin switch for auto security and lights. **CAT # PSW-2** 75¢ each • 100 for \$50.00

PIN SWITCH WITH MOUNTING BRACKET

2.55" long pin switch. Includes 3.7" x 1.4" metal mounting bracket and crimp-on bullet connector.

CAT # PSW-8 75¢ each • 100 for \$ 50.00

8

FAX YOUR ORDER 24 HOURS A DAY 7 DAYS A WEEK. (818) 781-2653

YOUR ORDER WILL SHIP THE NEXT BUSINESS DAY.

CAT# KSW-24 \$3.00 each

KEYPADS

TOUCHTONE KEYPAD

Farbell# DU200P (A).
Standard 12 button telephone keypad with touchtone (DTMF) circuitry. Field replacement for some GTE payphones. White plastic buttons with black numerals and letters.
11 color-coded leads,
9" long with spade lugs.

CAT# KP-11 \$3.00 each 25 for \$62.50

12 KEY KEYPAD

12 key keypad with numerals 0 –9,
* and #. Matrix encoded with one
common terminal. Contacts rated
20 mA @ 24 Vdc. 2.01" x 2.24".
Black with white buttons. Mounting
holes on 1.8" x 2.24" centers. Can be
rear-mounted through a 2.25" X 1.81" cutout.

CAT# KP-12 \$ 4.95 each

ALARM SWITCHES

STANDARD MAGNETIC PROXIMITY SWITCH

For closed loop alarm systems.

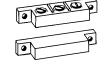
Switch is closed when magnet is near.

Cover hides screw terminals. Off-white switch and magnet. UL listed.

CAT# MS-14 \$3.75 ea. • 10 for \$32.50

SPDT

Can be used on normally open or normally closed loop systems. Switch measures 2" long X 3/8".



CAT# MS-7

\$3.50 each • 10 for \$32.50



PRESS-FIT MAGNET SWITCH

Press-fit into 3/8" hole. Ideal for windows and doors. For normally closed systems. 0.75" operating gap. U.L. listed.

CAT# MS-11 \$2.25 per set 10 sets for \$21.00

MECHANICAL ROTARY ENCODERS

Noble # SDE161PUB20F-1-5-32-32PC Manually operated rotary mechanical encoder. 3/8" threaded bushing. 1/4" flatted shaft x 0.55" long. 32 detents per revolution. 6 pin output.



CAT # MRE-1

\$1.00 each • 100 for \$75.00

4 BIT, 12 POSITION

Noble# SDB161(9x6)-PH20F-1-4-12-12PC 5 output pins. Has metal bracket to accommodate horizontal mounting in pc board. CAT # MRE-2

\$2.00 each • 10 for \$17.50

MUSICAL "EFFECTS" FOOT PEDAL

Fatar # VFP-1. High-quality, Italian-made foot pedal. S.P.S.T. normally-open switch. Elongated, piano-style pedal, 8.75" x 2.95" x 2.19" high. Quiet-action. Rubberized, non-slip enclosure and base. Metal pedal with removable protective Nylon cover. 7' cord with molded 1/4" phone plug. CAT # FSW-11 \$16.50 each

INFRARED DEVICES

IR SENDER / RECEIVER

Scottsdale Technologies, Program Master # KC-15S A hand-held infrared remote control device, probably



designed to be upgradeable via the internet. We don't know if they are in current use, but they contain some useful parts and may be the basis for IR remote projects. They operate on two AAA cells (not included). When button is pressed LED lights green, then turns red. Inside are two IR emitter LEDs and one L14C1 IR phototransistor on a PC board with a crystal, ceramic oscillator and other components.

CAT # IR-11 \$ 1.75 each

IR REMOTE SWITCH MODULE

Add infrared remote control to a project or existing device.

Allows device to be switched on or off using any video or audio remote. The single flip-flop type output is triggered by holding down IR remote button for 2 seconds. This prevents accidental triggering of the TV or audio device. On-board LEDs indicate switch status. Must be in an enclosure to prevent actuation by ambient IR radiation. PC board is 3.4" x 0.69." Operates on 6-12 Vdc delivering 75 mA at output. Use relay or solid-state device if higher output is desired. Kit includes a ruby IR filter, hardware and instructions.

CAT # IR-93 \$ 5.00 each

INFRARED EMITTER W/ CORD

Infrared emitting LED in an L-shaped plastic assembly. Molded onto a six foot cord with a 3.5 mm mini-phone plug on opposite end. Probably originally designed to extend the range of an IR control. 5 mm (T 1 3/4) LED. The L-shaped assembly is 0.37" wide x 1.57" long and has peel-off adhesive tape on front & back. CAT# ILED-12 \$1.50 each 10 for \$ 12.50 • 100 for \$ 85.00

INFRARED RECEIVER / RANGE EXTENDER

Infrared receiver on a 16' cord terminated with a 3.5mm stereo mini-phone plug. Were packaged with audio/video equipment to extend the range of the IR controls. Black plastic, mouse-shaped device at end of cord is 1.9" x 1.4" x 0.9" and has double sided tape for attachment to equipment or wall. Contains a Sharp #GP1U59 IR receiver module which could be removed.

CAT # IRD-8 \$2.50 each • 10 for \$20.00

THERMOELECTRIC COOLERS PELTIER JUNCTIONS



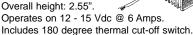
These incredible miniature solid state heat pumps raise or lower temperature in a small area almost instantly. Utilizing the Peltier effect these modules perform the same cooling or heating functions as freon based refrigerators but they do it with no moving parts, and are very reliable. Current applied to the device will produce heat on one side and cold on the other side, up to 68° C difference between the two sides. Modules can be mounted in parallel to increase the heat transfer effect or can be stacked to achieve high differential temperatures. Operate on 3-12 Vdc. Requires a heat sink to prevent overheating. Two sizes available.

1.18" (30 mm) square X 0.15" **CAT# PJT-1** \$17.00 • 5 for \$75.00

1.57" (40 mm) square X 0.15" **CAT# PJT-2** \$26.00 • 5 for \$110.00

THERMOELECTRIC COOLER WITH HEATSINK (USED)

Removed from a portable heating/cooling unit. 127 thermocouple device attached to 5" square x 1.22" high heatsink.
Overall height: 2.55".



CAT # TEC-1 \$26.00 each • 5 for \$100.00

THERMAL FUSES & BREAKERS

PC BOARD THERMOSTAT 80 DEG. C

Airpax # 66F080. PC mount 4 pin DIP package. Normally open. Closes on rise at 75 - 80 degrees C. Resets at 6 degrees C below the close temperature. Rated 1 amp @ 120 Vac. UL and CSA listed.

CAT# THSW-31 2 for \$1.00 • 10 for \$4.00

THERMAL FUSES _

One-time use thermal fuses for upper-limit protection on all kinds of appliances.

Limit			
<u>Temp</u>	CAT #	Mfg.	<u>Price</u>
91 C	THF-91	Microtemp	2 for \$ 1.00
93 C	THF-93	Microtemp	2 for \$ 1.00
141 C	THF-141	Elmwood	2 for \$ 1.00
152 C	THF-152	Elmwood	2 for \$ 1.00
167 C	THF-167	Microtemp	2 for \$ 1.00
184 C	THF-184	Microtemp	2 for \$ 1.00

BIMETAL DISC THERMOSTATS

Normally closed thermal limit switches. Open on rise at specified temperature. Automatic reset when temperature drops.

74 DEGREES C

Elmwood 3100-3-802 L74C. 0.6" dia. x 0.36" high. Mounting holes on 0.9" centers.

CAT # THSW-74 75¢ each

112 DEGREES C

Klixon # 1NT02L. 0.64" dia. x 0.57." 0.25" quick-connect/ solder terminals.



30K THERMISTOR

Keystone (Similar to #RL0503-17-56K-96-MS) 30K ohms @ 25 degree C (77 degree F.). Negative temperature coefficient. 0.2" long X 0.09" dia., epoxy insulated bead. 1.13" long teflon insulated AWG#30 wire leads. Prepped with 0.75" long metal tabs.

CAT# THR-19 2 for \$1.00 264 for \$79.20 (30¢ each) 1056 for \$211.20 (20¢ each)

SELCO THERMAL PROTECTORS

110 DEGREE C, NORMALLY CLOSED

Selco # UP61. Self-resetting

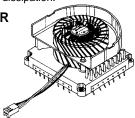
sap-action switch with quick-make/ quick- break, fast sensing action. Rated 4A @ 125 Vac.
Reinforced PBT enclosure, 0.61" x 0.25" x 0.12."
Open on rise at 110 degree C. 2.25" solid, uninsulated leads. **CAT # THSW-110** \$ 1.00 each 10 for \$ 9.00 100 for \$ 75.00

12 VDC HIGH EFFICIENCY FANS ω/ INTEGRATED HEAT SINK

Beautifully engineered assemblies designed for high efficiency CPU cooling. Panaflo 12 Vdc fan is built into a heatsink milled from a single block of aluminum with many slots and holes for maximum surface area and heat dissipation.

90 MM DIAMETER





Panaflo # FBA06A12H fan embedded in a 3.55" diameter x 1.6" high heatsink. The bottom face of the heatsink has a flat mounting surface, 2.54" x 2.12." The fan/heatsink assembly is mounted in another metal assembly, from which it can be easily removed. **CAT # CF-75** \$ 17.50 each

90 MM DIA. W/ FLAT SIDE

Similar to CAT # CF-75 above except the heatsink is flatted on one side. Also, the exterior metal assembly is not present. Fan diameter is 3.62".
3.21" diameter across the

flat side. 1.35" overall height. **CAT # CF-82** \$ 12.00 each



70 MM DIAMETER

Panaflo FBA06A12H fan embedded in a 2.75" dia. X 1.25" high heatsink. Heatsink sits on a 2.6" x 3.08" x 0.2" thick aluminum base with a 2.2" diameter raised mounting surface that adds an additiona

surface that adds an additional 0.15" of thickness to the base. Four mounting screws on 2" x 2.5" centers.

CAT # CF-103 \$ 10.00 each

DC FANS

5 Vdc, 60 mm

Mechatronics ® # F6025H05B 2.36" square x 1." 5 Vdc @ 0.41 Amps. Ball bearings. 7 blades. 8" pigtail leads prepped with connector. UL, CSA. **CAT# CF-105**

\$3.50 each • 10 for \$3.00 each

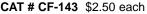
12 Vdc 35 mm

Elina Fan # KDA123510MB 1.38" square x 0.42." 12 Vdc 120 mA. 3" wire leads with two pin socket connector, 0.1" spacing. UL. Removed from new equipment.

CAT# CF-133 \$2.00 each • 10 for \$1.75 ea.

12 Vdc 40 mm

Adda # AD0412HB-G76 1.58" square x .4." 12 Vdc, 0.1Amp. DC brushless fan with ball bearings. Three leads; one lead is speed sensor lead, 10" long with 3-pin (.1" spacing) socket connector.



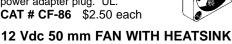
12 Vdc 40 mm

Sunon # KDE1204PFB3-8 1.58" square x 0.42." 12 Vdc 0.5 Watt. 2" wire leads with two pin socket connector. 0.1" spacing. UL. Removed from new equipment.

CAT# CF-134 \$1.75 each • 10 for \$1.50 ea.

12 Vdc 40 mm

Adda # AD0412HB-G70
1.58" square x 0.4". 12 Vdc 0.1 Amp.
7 blades. 11" leads with 4 pin Molex power adapter plug. UL.



Iceberg ™ by Foxconn ®. 12 Vdc square mini-fan and heatsink designed for use with Pentium series PPGA370, AMD K6 and Cyrix M2 CPUs. Quiet, reliable design. Includes easy-on clip. Also good for other cooling applications.

Heatsink is 1.92" x 2.02" x 0.83" high. Assembly is 1.22" high including fan. Bottom of heatsink has a 1" square patch of thermal compound. UL, CSA.

CAT # CF-73 \$4.50 each

586 CPU COOLING KIT

12 Vdc fan on a 2.04" x 1.98" heatsink with easy-install/ release clip. Overall height, 0.83." Compatible with Intel Pentium 75-150MHz, IBM6X86-100, Cyrix 6X86 110-133Mhz and AMD K5.

11" leads with male/female molex adapter for in-line connection. UL, CSA, VDE.

CAT # CF-113 \$4.50 each

12 Vdc, 60 mm

Canon # CF60-T314N1D 2.37" square x 1." 12 Vdc (9 – 13.8V) 70 mA. Ball bearings. 7 blades. 12" pigtail leads. 0.33 m³/min. 23dB. UL, CSA. **CAT # CF-106** \$4.00 ea.

10 for \$3.50 each • 100 for \$2.75 each

12 Vdc, 80 mm

Jamicon ® # JF0825B 3.15" square x 1." 7 blades. 12 Vdc @ 0.15 Amps. 7" pigtail leads prepped with 2 pin connector. CAT # CF-107 \$ 4.50 each

12 Vdc, 80 mm FAN

Panaflo ® Model # FBA08A12L 3.15" square x 1." 12 Vdc, 0.1Amp. Operates 7 – 13.8 Vdc. 24 CFM. 7 blades. 12" pigtail leads. UL, CSA. CAT # CF-109 \$ 4.50 each Case price -100 pcs \$ 3.25 each

12 Vdc 80 mm

Sanyo Denki "Petit Ace 25" # 109R0812M401 3.17" x 3.17" x 1." 12 Vdc, 0.09 Amp. 7 blade impeller. Three leads, one speed sensor, 10" long. UL, CSA. CAT # CF-144 \$4.00 each

12 Vdc 92 mm

Nidec Beta SL # DO9T-12PH 3.64" square x 1". 12 Vdc, 0.17 Amp. 7 blades. 11" leads.

CAT # CF-87 \$5.00 each

SPECIAL - 12 Vdc 119 mm

Sanyo Denki "San Ace 25" # 109P1212M4011. 4.7" square x 1." 12 Vdc @ 0.14 Amps. Medium speed fan. Three leads; one is a pulse (speed) sensor. UL, CSE. CAT # CF-139 \$6.00 each Case price - 30 pcs \$4.75 each

12 Vdc 120 mm

Mechatronics ® # E1225H12B1 4.71" square x 1" ball bearing fan. 12 Vdc @ 0.385 Amps. 82 CFM. 12" pigtail leads. Has a third lead, probably for tach output signal. UL, CSA. CAT # CF-114 \$6.75 ea.

12 Vdc, 120 mm

Elina # HDF1225-12HHB 4.7" square x 1". 12 Vdc, 0.56 A. 7 blade fan. 12" pigtail leads.

CAT # CF-101 \$ 6.75 each

24 Vdc, 80 mm

Panaflo® DC Brushless Model FBA08A24M 3.15" square x 1." 24 Vdc @ 0.1 Amp. (14-27.6 Vdc) 32 CFM. 7 blade impeller. 11" pigtail leads. UL, CSA.

CAT # CF-118 \$3.00 each • 10 for \$2.75 ea. Case of 100 for \$2.00 each

12 Vdc 120 mm COOLING FAN

Adda # AD1212HB-F52 4.72" square x 1.52" high-speed ball bearing fan. 12 Vdc, 0.50 Amp. Metal frame. 5 blade thermoplastic impeller. 10" pigtail leads. UL, CSE.

CAT # CF-132 \$ 7.50 each



















24 VDC 6.75" DIAMETER "PATRIOT"® FAN

Comair/Rotron "Patriot"®
PQ24B4QDNX. 6.75" dia. x
2" thick. 24 Vdc, 1 Amp. Metal
housing. Seven blade thermoplastic impeller with Feathered
Edge (tm) for lower noise. 235 CFM.
Two pin connector fit most fan plugs or
can be soldered. UL, CSA, TUV.
CAT # CF-141 \$ 12.50 each

24 VDC "PATRIOT"® FAN, USED

Same fan as CF-141, above. Removed from new equipment in good condition. **CAT # CF-135** \$ 9.50 each

24 Vdc, 80 mm

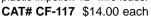
Mechatronics # F8025L24B 3.15" square x 0.98". 24 Vdc @ 0.06 Amp. 7 blade, ball bearing fan. 13" pigtail leads. UL, CSA. CAT # CF-88 \$4.00 each



AC FANS

115 Vac 80 mm

EZ Fan# FP-108A-S-3. 3.13" square X 1.5". 110/120 Vac, 0.5 Amps. 17 CFM. Zinc housing with seven blade thermoplastic impeller. 12" wire leads. UL/CSA.



115 Vac 119 mm

EZ Fan # FP-108-1-S3.
4.69" square x 1.5". 110/120 Vac,
0.11 Amps. 54 CFM. Aluminum
housing with 5 blades. Terminals
can be soldered or used with
standard fan plug. UL, CSA.
CAT# CF-120 \$14.00 each



115 VAC 120 MM

Arctic # KEST-470.
4.77" square x 1.54."
115 Vac, 0.24 Amps.
115 CFM. Sleeve bearings. Metal housing with 5 blade thermoplastic impeller. Two pin connector for solder or standard fan cords. UL, CSA.

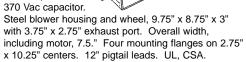
CAT# CF-146 \$14.00 each



CENTRIFUGAL BLOWERS

115 VAC DUAL-SPEED CENTRIFUGAL BLOWER

Fasco # 7062-5301
Two-speed induced draft blower for heating and cooling applications.
Thermally protected, ball-bearing, shaded-pole motor.
3000 / 1900 RPM.
Rated 115 Vac @ 0.95 Amps. 5 MFD/



CAT # CF-148 \$ 15.00 each

10 for \$ 12.00 each

12 Vdc MINIATURE CENTRIFUGAL BLOWER

Nidec Gamma 26 Model# A33998-55 2.01" \times 2.012" \times 0.59" miniature blower. 12 Vdc 0.14 amp. Thermoplastic frame. Ball bearings. Air outlet dimensions: 0.69" \times 0.48." UL, CSA.

CAT # CF-138 \$ 4.00 each

12 Vdc 75 mm BLOWER

Delta # BFB0712H 75 mm square x 30 mm miniature 12 Vdc blower. 12 Vdc, 0.36 Amps. Air outlet is 0.96" x 1.41." UL, CSA. CAT# CF-145 \$ 6.50 each



METAL FAN GUARDS

GUARD FOR 60 MM SQUARE FANS

CAT# CFG-60 \$1.00 each



CAT# CFG-80 \$1.25 each



CAGE FOR 80 MM SQUARE FAN

Metal fan guard, raised 0.5" from surface of fan.

CAT# CFG-81 \$ 1.35 each



GUARD FOR 118/120 MM SQUARE FANS CAT# CFG-120 \$1.60 each

GUARD FOR 160 MM FANS

Mounting holes on 6.375" centers. **CAT # CFG-160** \$ 1.75 each



FAN CORDS

36" FAN CORD

With a straight plug. CAT # CFC-5 75¢ each

6' 8" FAN CORD

W/ AC PLUG
Fits standard
two-prong fan
connectors on many
115 Vac cooling fans.
6' 8" long. Has standard

6' 8" long. Has standard two-prong AC plug on opposite end. **CAT# CFC-6** \$1.55 each



HEAT SINKS

TO-220 Thermalloy# THM-6045. Clips onto TO-220 devices. 1" X 0.75" X 0.34". **CAT# HS-6045** 5 for \$1.00 • 100 for \$15.00



0.95" x 0.88" x 0.38"

Aluminum heatsink. 8 cooling fins on one side. 0.6" X 0.8" flat space on the other side for mounting a device. **CAT# HS-84** 4 for \$1.00





CPU COOLER W/ CLIP

Aavid ™ black anodized heatsink. 1.97" x 1.96" x 1.77" high. 1.38" square thermally conductive pad on bottom of heatsink. Stainless steel clip for Zif sockets.

CAT # HS-70 \$1.25 each • 10 for \$10.00

EXTRUDED ALUMINUM

1.58" x 3.7" x 1.75" high. Weight: 0.5 lbs. Assorted small, tapped mounting holes along the bottom and side of the unit. CAT # HS-77 \$2.50 each

TO-220 / TO-218 HEATSINK

Heavy-duty, extruded aluminum, & gold anodized heatsink for TO-220 and TO-218 tab-type semiconductors. 1.64" x 0.98" x 1" high. 0.1" diameter mounting feet on 1" centers. Flat mounting surfaces on two sides will accommodate devices. Large quantity available.

CAT # HS-89 3 for \$ 1.00 100 for 26¢ each • 1000 for 18¢ each

TO-220 / TO-218 HEATSINK

Heavy-duty, extruded aluminum, gold anodized heatsink for TO-220 and TO-218 tab-type semiconductors. 0.65" x 0.63" x 2" high. 0.1" diameter mounting feet on 0.4" centers.



EXTRUDED ALUMINUM HEATSINK

1.58" x 6.5" x 1.75" high. 1.36" wide on one end. 1" length of cooling fin removed on one end. Weight: 0.84 lbs. Assorted small. tapped mounting holes along the bottom and side of the unit. **CAT # HS-78** \$3.50 each

TO-220 SNAP-ON HEATSINK

Thermalloy# THM-6043. TO-220 heatsink. Snaps to any TO-220 device. CAT# HS-6043 4 for \$1.00



2.95" x 1" x 0.75" HEATSINK

Extruded aluminum heatsink with cooling fins on two sides and a 0.5" square tunnel through the middle. Mounting surface is 2.95" x 1." CAT # HS-80 \$1.00 ea.

GREEN ANODIZED

2.03" x 2.07" x 1.08" high. Aluminum heatsink with eight rows of cooling fins, six rows are 1.08" high, the last two are 1" and 0.54" high respectively. **CAT# HS-86** 75¢ each



TO-3 and TO-220

Holes punched for one TO-3 device and eight TO-220 devices. 1.82" square X 1.3" high. CAT# HS-221 \$1.25 each



MICROPROCESSOR **HEAT SINK (USED)**

Black anodized aluminum. 1.9" square X 0.25" thick. Removed from equipment. Has adhesive residue on one side. CAT# HS-56 45¢ each

ROUND HEATSINK WITH **COMPOSITE MOUNTING CLIP**

1.36" diameter x 0.24" high heatsink with three cooling fins. The lower part of the heatsink is 0.6" diameter and screws into a black composite mounting clip which appears to fit over a device about 0.82" wide. CAT # HS-59 50¢ each

EXTRUDED ALUMINUM HEATSINK

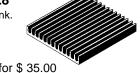
6.38" X 3.05" X 1.05" extruded aluminum heatsink. 30 cooling fins. Has some removable spring clips which may have originally been designed for use with CPU or thermoelectric cooler. Four 0.25" holes on 1.85" X 1.35" centers. Weight: 0.75 lb CAT# HS-47 \$2.50 each

1.8" x 1.76" x 0.28"

Black anodized heatsink. Adhesive thermal compound on bottom.

CAT # HS-81

2 for \$ 1.00 • 100 for \$ 35.00



2.35" SQUARE MICROPROCESSOR **HEATSINK**

Black anodized aluminum. 2.35" x 2.35" x 0.95" high. Thirteen rows of cooling fins. Standard clips for fastening to microprocessor.

CAT# HS-75 \$ 1.25 each

3" x 3.16" x 1.3"

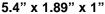
Wakefield "Penguin Cooler" # 919029. Black anodized aluminum heatsink.

CAT # HS-74 \$1.75 each



8.25" X 0.82" X 1"

Aluminum heatsink with 4 cooling fins on one side and 0.63" wide x 0.35" deep channel on the other side. Has six threaded mounting holes spaced 0.50" apart. CAT # HS-88 \$1.35 each



Extruded aluminum heatsink 1" x 1" patch of thermally conductive adhesive on back for attachment to CPU. Four mounting holes on 2.5" x 1.4" centers. Includes CPU clip.

CAT # HS-83 \$ 1.75 each



BUZZERS, BEEPERS, AUDIO ALARMS

NEW REDUCED PRICES LOUD PIEZO SIREN ASSEMBLY

Complete pc board assembly from a personal alarm system for protecting windows and doors. Makes a piercing, high-pitched sound when connected to a 9 volt battery. Includes a 1.5" diameter encased piezo element, audio transformer and other components. 2.4" x 2" x 0.87." Battery not included. Large quantity available. CAT # SBZ-10 75¢ ea. • 10 for \$ 0.65 ea. 100 for 50¢ ea. Case of 270 pcs for 35¢ each

PIEZOELECTRIC BEEPERS

High pitched piezo alarm signals with built-in oscillator circuitry. Low power consumption. Used in alarms, smokedetectors, electronic games, cameras and telephones.

AMSECO PAL-328 REPLACEMENTS

Operates on 3-28 Vdc. Continuous tone. 103 db sound pressure. 1.14" dia. x 0.93" ABS plastic housing. Can be bulkhead mounted with tabs on 1.31" mounting centers, or can be mounted through a panel hole of 0.7" diameter via threaded bushing and panel nut. 5" wire leads.

CAT # SBZ-100 Black housing \$ 3.75 each

Surplus Special - Projects Unlimited # EXL-450 Gray housing CAT # SBZ-450 \$ 2.85 each

PIEZO ALERT

Audible piezo alarm emits a solid, highpitched tone of low to medium loudness. Operates on 3-15 Vdc. 0.54" diameter x 0.3." PC leads on 0.3" centers. CAT # SBZ-412 \$1.25 each • 100 for 85¢ each 500 for 75¢ each • 1000 for 60¢ each

SONALERT ™ REPLACEMENTS

Plastic enclosed piezo sounders which can be mounted through a 1.08" diameter chassis hole and are fastened with a knurled plastic nut. Dimensions of body behind mounting panel, 1.7" diameter x 1.23". Screw terminals or 1/4" quick-connect.

4-28 Vdc Operation

Continuous tone. Loud 95 db sound pressure. CAT # SBZ-650 \$ 5.50 each

4- 28 Vdc, Pulsing Tone

Projects Unlimited # EAI-381KP Pulse rate, about 1.2 Hz @ 12 Vdc. 2900 Hz signal. 95 db @ 30 cm. Gray ABS plastic housing.

CAT # SBZ-381 \$ 4.75 each

6-12 Vdc Operation

Continuous tone. Exact specs unknown. Medium volume. CAT # SBZ-9 \$ 3.00 each

30 - 120 VAC/VDC PIEZO SIGNAL

Projects Unlimited, Inc. # EAI-382K. Loud, 95 db, steady tone. Designed to operate on AC or DC voltage, 30 - 120 volts. Will work as low as 6 volts, but not as loud. Gray plastic body.

CAT # SBZ-382 \$5.00 each

6-12 VDC BEEPER

Intervox. Provides a moderately loud, high-pitched tone on 6-12 Vdc. 1.19" dia. x 0.68" black plastic encased piezo beeper. PC leads on 0.6" centers.

CAT # SBZ-221 \$2.00 each

SONALERT MCP320

3 - 20 Vdc, (3 - 20 mA) audible signal device. 0.95" dia. x 0.68" high. 3.15Khz. 55 dB @ 3 VDC, 74 dB @ 20 Vdc. PC leads on 0.6" centers. CAT# SBZ-321 \$2.50 each

PROJECTS UNLIMITED # AI-256K

3-20 Vdc. Rated voltage 12 Vdc @ 12 mA. 0.92" dia. x 0.38" black ABS plastic case. Resonant frequency, 3100 Hz. 80 dBA @ 30 cm. PC leads on 15mm (0.59") centers.



CAT# SBZ-256 \$ 2.25 each

ENCASED PIEZO ELEMEI

Plastic encased piezo elements are more resonant and louder than non encased piezo elements. They require external signal to produce sound.

0.9" DIAMETER X 0.17"

Attached to a 28" lead with a small co-ax plug at one end and a 2 pin connector in the middle of the cord. 0.78" dia. element.

CAT # PE-40 75¢ each • 100 for \$ 50.00

0.97" DIAMETER X 0.32"

Murata # PKM25-6A0 Three terminal, self-excited encased piezo element. Prepped with 0.37" wire leads.

CAT # PE-36 2 for \$1.00 • 100 for \$ 40.00

1.18" DIAMETER X 0.32"

Daeyoung. Enclosed piezo element in black case, Two 34" wire leads terminate to 3 pin connector. Mounting holes on 1.35" centers. Requires external signal to produce sound.

CAT# PE-43 75¢ each • 100 for 50¢ each

1.19" DIAMETER X 0.29"

Shigma # SHI-1130. Black case. PC leads on 0.6" centers.

CAT# PE-34 75¢ each 10 for \$6.50 • 100 for \$50.00



1.31" DIAMETER X 0.5"

Kyocera# KBS-30DB-1A-38 Blue case, 4" long wire leads. Mounting holes on 1.5" centers.

CAT# PE-28 75¢ each • 120 pieces \$70.00

1.36" DIAMETER X 0.34"

AVX/ Kyocera # KBT-34SB-1A Piezo element encased in a black plastic resonant module.



Designed for tone ringer in telephones, device requires external signal to produce sound. Mounting holes on 1.57" centers. 6" wire leads.

CAT# PE-35 75¢ each • 100 for \$50.00

DIA. PIEZO ELEM

Kyocera. 35mm brass piezo element with exciter circuit. Three 2" wire leads.

CAT# PE-44 \$1.00 each 10 for \$8.50 • 100 for \$60.00



MINI TONE TRANSDUCERS

Used in paging, warning signals, metal detectors and alarm clocks. Miniature magnetic transducers require external signal source to produce sound.

BUJEON # BBM-01

0.375" diameter x 0.2" miniature transducer. Sound port on one side. PC pins on 0.15" centers. CAT # PZB-01

3 for \$1.00 • 100 for \$25.00 • 1000 for \$125.00

0.82" DIAMETER X 0.15"

AVX/Kyocera # PCRT21BGX Black plastic front, vented metal back. Solder loop terminals. CAT # PE-38



3 for \$1.00 • 100 for \$25.00 • 1000 for \$125.00

150 OHM ENCASED SPEAKER

Keyrin # KR-285. Small 150 ohm mylar speaker encased in a black plastic housing, 1.1" diameter x 0.3" thick.

Two mounting ears with holes on 1.4" centers. CAT # PE-41 3 for \$ 1.00 • 100 for \$ 25.00

MINIATURE TONE TRANSDUCER

0.47" diameter X 0.33ू" high. 5" wire leads.

CAT # PZB-25

50¢ each • 100 for \$25.00

1.65" DIAMETER X 0.63"

Monaco # MPA-3400. White case. 6" leads. Mounting holes on

1.9" centers. CAT # PE-42 75¢ each

METAL BUZZERS

1.94" diameter face. 1.68" diameter body.

6 - 9 Vdc CAT # BZ-2 \$1.00 each CAT# BZ-9 \$1.00 each 115 Vac



SIRENS

INCREDIBLE PRICE! PIERCING PIEZO MINI-SIREN

This piezo siren emits a piercing 100 db warble tone that is uncomfortable for anyone nearby. Only 2.3" long x 1.7" x



1.5," it has an adjustable metal mounting bracket and comes with 6' of wire. Operates on 9-12 Vdc. Includes a clip for operation with a 9V battery. Ideal for auto or home alarms. Large quantity available. CAT # ES-12 \$ 3.00 each

10 for \$ 2.50 each • 100 for \$ 1.50 each

MINIATURE SIREN

Shrill, warble tone miniature electronic siren. Operates on 6 - 14 Vdc. Makes a lot of noise for its size. Ideal in a room or automobile. Makes the environment uncomfortable to remain in. 1.86" x 1.55" x 0.9" thick matte black enclosure. Two recessed mounting holes on diagonal corners. Wire leads. CAT# ES-5 \$5.95 ea.

ELECTRONIC SIREN

Electronic warble tone siren. 4.3" square x 2.2" white plastic enclosure. Operates on 12 Vdc. Mounts on wall or any flat surface via four screw holes in back plate. Wire leads. CAT # ES-6 \$7.50 each



12 VDC SIREN

Crimestoppers # CS-194C Ear-piercing warble-tone siren for auto or home use. 3.75" diameter x 3.9" deep impact-resistant plastic horn. Adjustable metal mounting bracket. 3' wire leads. Suitable for outdoor use. Limited quantity.

CAT # ES-1 \$ 9.50 each

4 1/2" X 8" SUPER SIREN

Three wire hook-up allows either steady tone or high/low yelping. 6 - 12 Vdc operation @ 1.25 amps. Made of high impact ABS plastic.

CAT# SS-86 \$19.75 each



CIRCUIT BREAKERS

LITTELFUSE 815 SERIES

120 volt circuit breaker designed for use in TV, audio, machines, etc. 1.81" X 0.59" X 0.9". CSA certified.

1.75A. Tab mount.

CAT# CB-134 4 for \$1.00 • 100 for \$15.00

ETA CIRCUIT BREAKERS

Resettable circuit breakers 1.15" X 0.75" X 0.43" body. UL, CSA.



0.3 AMP NON-THREADED BUSHING

ETA # 41-04-P30

0.3A, 250 vac. 0.275" dia. non-threaded bushing. CAT # CB-031 \$1.00 each • 10 for \$8.50

1.5 AMP- PC MOUNT

ETA # 41-04-PR. Three pc mounting legs. CAT # CB-150 \$1.25 each • 10 for \$11.00

Subminiature Circuit Breakers AUGAT/ALCOSWITCH SC SERIES

PC board circuit protectors. Able to withstand high transitory currents often produced by capacitors in a circuit. Since this is a thermal device relying on heat generated by an overload condition, response time is inverse to the degree of overload. Suitable for AC or DC circuits up to 24 volts. 0.7" X 0.2" X 0.44".

Trip rating mounting

500 ma. 1 amp upright 1.5 amp

upright

right angle CAT# SC-0.50AR CAT# SC-1.0A CAT# SC-1.5A

Cat#

SC series circuit breakers 4 for \$1.00 • 100 for \$15.00

RESETTABLE CIRCUIT PROTECTOR, 0.65 - 1.3 AMP

Raychem "Polyswitch" # RXE-065S-1 General purpose circuit protectors for power supplies, alarm systems, speakers, motors etc. Unlike traditional fuses, they automatically reset when fault condition is cleared. Can be paralleled for higher ratings. Current: 0.65 Amps. Trip Current: 1.3 Amps. Max Voltage: 60 Volts. 0.33" dia. UL, CSA. **CAT# RXE-065** 3 for \$1.00 • 100 for \$ 20.00

500 for \$85.00 • 1000 for \$150.00

FUSE HOLDERS

AGC (3AG) FUSE HOLDERS (For fuses 1/4" X 1 1/4")



PANEL MOUNT

Screw style cap. Holder fits 3 AG (AGC) or MDL fuses. Chassis mounting hole 75¢ each • 10 for \$7.00 • 100 for \$65.00

Littelfuse # H342058L. Fusepost with bayonet-type cap. Solder terminals. UL, CSA



CAT# FHPM-46 75¢ each • 100 for 60¢ ea.

HARNESS ASSEMBLY WITH 2 IN-LINE FUSE HOLDERS



Wire harness from auto cellphone kit. Includes two 3AG in-line fuseholders and 12 feet of 18 AWG stranded black, red and green or yellow wire. CAT # FHP-19 \$1.00 each

IN-LINE AGC (3AG) FUSE HOLDER



For AGC (3AG) fuses. Red wire. Fuse not included. CAT# FHP-2 50¢ each • 10 for \$4.00

GMA FUSE HOLDERS

(For fuses 3/16" X 3/4")

PANEL MOUNT HOLDER FOR GMA FUSE



Alco GMA fuse holder for 3/16" x 3/4" fuses. Screw cap. Solder-lug terminals.

Rated 10 Amps 250 Vac. CAT # FHPM-45 2 for \$ 1.00 • 100 for 35¢ each

PANEL MOUNT HOLDER FOR GMA FUSES



Buss # BK/HTB-32M. Shock-proof, international style fuse holder for GMA (5mm X 20 mm) cartridge fuses. Screwdriver slot cap. Mounts in 0.5" diameter chassis hole. Straight solder terminals. Extends 1.9" behind panel. UL, CSA, SEMKO and VDE

CAT# FHPM-33 50¢ each • 10 for \$4.50

HORIZONTAL PCB MOUNT

Schurter # FAU 0031.3571 Shocksafe pc board fuse holder for GMA fuses. Slotted bayonet fuse carrier. Overall length, 1.77" x 0.48" high. PC leads. UL, CSA, VDE. $\,$ CAT # FHPM-43 $\,$ 75¢ each

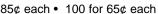
FUSE CLIPS FOR AGC FUSES

Requires 2 clips per fuse. PC mount with pins on 0.3" mounting centers. Fits 3AG fuse. CAT# FC-PC 2 for 30¢ • 100 for 7¢ ea.

Mounting pins are on 0.25" centers. Requires 2 clips per fuse. CAT# FC-PC2 2 for 30¢ • 100 for 7¢ each

MINI-BLADE FUSEHOLDER

Water-resistant, in-line fuse holder for Littelfuse 297 series fuses. Snug protective cover. Black AWG 14 wire leads, 30" and 5." CAT# FHP-24



ATC BLADE FUSE HOLDER

Red, 14 gauge stranded wire. 8" length.



CAT # FHP-22 75¢ each

FUSE BLOCKS FOR AGC FUSES (3AG)

3AG FUSE BLOCK

Littelfuse # 354601GY. Gray plastic fuse block with single screw mounting. 20A. 0.185" qc or solder terminals. UL, CSA.

CAT # FHBL-3 65¢ each • 100 for 50¢ each

3AG FUSE BLOCK

Littelfuse # 357. Phenolic block. Single screw mounting. Solder or 0.187" qc terminals.



CAT# FHBL-6 65¢ each • 100 for 50¢ each

DUAL 3AG FUSE BLOCK

Littelfuse # 354802-GY. Fuse block for two AGC fuses. Glass-filled polyester. 1.4" x 1.13" footprint. Rated 20 A @ 300 V.

Solder or 0.25" qc terminals. Recessed mounting holes in the middle of each holder. UL, CSA.

CAT # FHBL-42 85¢ each • 100 for \$ 65.00

5 FUSE BLOCK

Black phenolic block, 2.3" x 1.87" x 0.88" high. Rated 10 amps @ 250 vac. CAT# FHBL-50 \$2.00 each



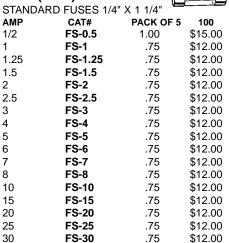
ATC AUTOMOTIVE BLADE FUSES

Used in many current model automobiles. 3/4" X 1/8". Fits fuseholder FHP-22.

<u>AMP</u>	COLOR	CAT#	PACK OF 5	<u>100</u>
3	VIOLET	FSA-3	.75	\$12.00
5	TAN	FSA-5	.75	\$12.00
10	RED	FSA-10	.75	\$12.00
15	TEAL	FSA-15	.75	\$12.00
20	YELLOW	FSA-20	.75	\$12.00
25	CLEAR	FSA-25	.75	\$12.00
30	GREEN	FSA-30	.75	\$12.00

FUSES

3 AG (AGC) FUSES



3 AG (MDL)

1/4" X 1 1/4	" SLOW BLO	W FUSES		
AMP	CAT#	PACK OF 5	100	
3/8	FSSB-0.375	2.00	\$32.50	
1	FSSB-1	1.75	\$30.00	
1.5	FSSB-1.5	1.75	\$30.00	
2	FSSB-2	1.75	\$30.00	
3	FSSB-3	1.75	\$30.00	
4	FSSB-4	1.75	\$30.00	
5	FSSB-5	1.75	\$30.00	
6	FSSR-6	1 75	\$30.00	

GMA SIZE FUSES

MINIATURE FUSES 3/16" X 3/4"									
AMP	CAT#	PACK O	F 5 100						
1/2	GMA-05	1.00	\$15.00						
1	GMA-1	.75	\$12.00						
1.5	GMA-1.5	.75	\$12.00						
1.6 slow blow	GMA-1.6SB	1.00	\$15.00						
2	GMA-2	.75	\$12.00						
2 slow blow	GMA-2SB	1.00	\$15.00						
3	GMA-3	.75	\$12.00						
3.15	GMA-3.15	.50	\$9.00						
4	GMA-4	.75	\$12.00						

1AG FUSE, 5 AMP

Littelfuse # H 301005 0.25" diameter x 0.62" long.



\$12.00

.75

CAT# 1AG-5 4 for \$1.00 • 100 for \$15.00

8 AG FUSE, 6 AMP 1/4" X 0.9"

GMA-5



MINI-BLADE FUSES, 10 AMP

CAT# 8AG-6 3 for \$1.00

Red, 10 amp blade fuse. Leads on 0.3" centers. **CAT # MF-10** 3 for \$ 1.00 • 100 for \$ 25.00



PC MOUNT FUSE, 2 AMP

1400 pcs tape & reel 8¢ each

Wickmann Microfuse TE-6 # 39612000000 2.00 Amp time-lag fuse. Wire leads on 0.2" centers. **CAT # FS-102** 4 for \$ 1.00 • 100 for 17¢ each



PICOFUSE MINI-AXIAL FUSES

10 AMP

CAT # PFA-10 4 for \$ 1.00

100 for 15¢ each • 1000 for 9¢ each

15 AMP

CAT # PFA-15 4 for \$ 1.00 100 for 15¢ each • 1000 for 9¢ each



GOLD AGU (5AG) FUSES

1.5" long x 0.41" diameter. Gold-plated fuses for high current applications.

Sold in packages of 5 pieces. 32 Volt max.

40 Amp CAT# AGU-40 \$2.95 per package 50 Amp CAT# AGU-50 \$2.95 per package 60 Amp CAT# AGU-60 \$2.95 per package

IN-LINE FUSEHOLDER FOR AGU FUSES

Waterproof, see-through fuse holder for AGU fuses. Clear bulkhead mounting bracket with holes on 1.25

bracket with holes on 1.25" centers.

Gold-plated pressure couplings on each end for use with 4-10 AWG wire.

CAT # FHP-79 \$3.50 ea. • 10 for \$3.00 ea.

HEADPHONES

KOSS DIGITAL STEREO HEADSET

Koss MAC-5
Made for Ford Vans.
These lightweight,
adjustable headsets
have great sound
quality with great bass
response for home or studio.
Frequency response:

disets and at bass ome or studio. Honse:
8' rubberized cords are a 3.5mm stereo phone plug.

20-20,000 HZ. 8' rubberized cords are terminated with a 3.5mm stereo phone plug.

CAT# HP-5 Blowout Pricing - was \$11.95 ea.

now only \$6.95 each • 10 for \$5.75 each

KOSS "EAR BUDS" FOR PORTABLE STEREOS

Koss # KSC-19.
Unique sportclip
design fits comfortably
over the ear, eliminates the
need for headband. Neodymium,

rare-earth magnet and oxygen-free cable for impressive sound in a small, ultralight package. 4' cord with 3.5mm mini-plug. 16 ohm impedance. Frequency response: 20-20,000 Hz.

CAT # HP-11 \$4.75 each 20 for \$4.25 each • 100 for \$3.50 each

LABTEC "BEHIND-HEAD" STEREO HEADPHONE

Labtec # LT-740. New "Switchback," behind-thehead design provides unobtrusive comfort. Headband sits low on the back of the head allowing you to wear a hat or keep your hair neat. Great sound quality - neodymium magnets for deep, powerful bass. 30mm mylar cone drivers for accurate audio reproduction. Goldplated 3.5mm stereo plug fits most portable stereos, CD players and digital music devices. In-line volume control. Freq. Response: 20-20K Hz. Impedance: 32 Ohms. Retail packaging. CAT# HP-740 \$6.00 each

ECONOMY HEADPHONES with ADAPTER

Stereo headphones for portable stereos or computer applications. Adjustable headband, padded earpiece and 3' cord with 3.5mm mini phone plug.

Includes 3.5mm to 1/4" stereo adaptor.

CAT# HP-12 \$2.50 each 10 for \$2.00 each • 100 for \$1.60 each

LIGHTWEIGHT STEREO HEADPHONES

Lightweight stereo headphones for audio and computer applications. Adjustable headband. 3.5mm phone plug with 4' shielded cord.

CAT# HP-100 \$1.75 each

10 for \$ 1.50 each • 100 for \$ 1.20 each



HEADPHONES W/ MIKE

LABTEC HEADPHONE W/BOOM MIKE

Labtec # LVA-8520. Designed for PC interactive audio applications. Padded stereo headphones with electret boom mike. Adjustable headband. 8' cord terminated with 3.5mm stereo phone plugs

for mike and headphones.

CAT# PHN-23 \$7.50 each

MULTIMEDIA HEADSET WITH CONTROLS

Labtec # LVA-8525. Padded stereo headphones with electret boom mike. In-line volume control for headphones and on/off switch for microphone. 6' cord terminated with two 3.5mm stereo phone plugs, one for headphones, one for microphone.

CAT # PHN-22 \$ 9.50 each

"OVER-EAR" HANDS-FREE HEADSET W/ BOOM-MIKE

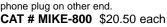
This "hands-free" headset puts the earpiece outside of your ear and has a boom-mike to get the mike closer to your mouth. Works with Motorola Star-Tac, Samsung and other cell phones as well as FSR radio, some cordless phones and computers. Beige headset and 5' cord with right-angle 2.5mm stereo mini phone plug. CAT# PHN-21 \$4.95 ea.

600 OHM MIKE

Public address or Karoke microphone. 8.5" long. Black handle and windscreen. On-off switch. With 1/4" phone plug. Ideal for PA use. CAT# MIKE-340 \$5.00 each

CARDIOID DYNAMIC MIKE

Well-suited for stage and public address applications. Uni-directional, cardioid polar pattern resists feedback. 600 ohm impedance. On/off switch. Charcoal wind-screen and handle. 2.1" diameter x 6.75" long. Includes carrying case and 16' shielded cable with XLR female connector on mike end and 1/4" phone plug on other end.



COMMUNICATIONS MICROPHONES

Push-to-talk, hand-held microphones for CB or other communications. Coil cord.5 pin DIN connector.

CAT# MIKE-43 \$ 3.50 each



ELECTRET MIKE w/ DESK STAND

Electret condenser desk mike. 7.5" boom swivels up and down. Beige mike, stand and cord. 3'6" cord terminated with 3.5mm stereo phone plug.

CAT # MIKE-53

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\$2.75 each

ELECTRET MICROPHONES

All of the electret microphones listed below, including those that are part of headphone microphone assemblies, require a low current voltage of 1.5 - 10 Vdc to operate. They will not function in applications that are not specifically wired for electret microphones.

ELECTRET MIKE

Primo # EM-80XH. 0.4" diameter x 0.29"

CAT # MIKE-45 2 for \$ 1.00

MINIATURE ELEMENT

Panasonic # WM-66D501A. Noise cancelling mike. 0.24" diameter x 0.14" high. Operates on 2-10 Vdc.

CAT # MIKE-46 75¢ each 10 for \$6.00 • 100 for \$50.00

ELECTRET MIKE

Primo Microphones. 0.39" dia. x 0.3." 2.25" insulated pigtail leads. CAT # MIKE-52 2 for \$1.00

ELECTRET MIKE W/ 2.5MM PLUG

From hands-free cell phone kit. 10' cord terminated with 2.5mm sub-mini phone plug.

Black housing, 1.67" x 0.93" x 0.54" high. Includes a small piece of self-stick Velcro. CAT # MIKE-55 \$ 1.25 each

ELECTRET MIKE W/ 3.5MM PLUG

From hands-free cell phone kit. 12' cord terminated with 3.5mm stereo mini-plug. Black housing, 1.25" x 0.64" x 0.7" high. Self-stick Velcro attached.

\$1.25 each CAT # MIKE-56

ELECTRET MICROPHONE

Electret mike in a black plastic enclosure with double-stick tape backing. 1.7" x 0.8" x 0.5" thick. Part of a cell phone hands-free kit. 10' cord terminated with a two pin connector. CAT # MIKE-49 75¢ each

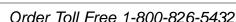
GOOSENECK **ELECTRET MIKE**

Electret condenser desk mike with a 12" flexible gooseneck. Beige mike, stand and cord. 4' cord terminated with 3.5mm stereo phone plug. CAT # MIKE-51 \$ 3.00 each

ELECTRET MIKE w/ CLIP AND HOLDER

Beige electret mike with 8' cord terminated to a 3.5mm phone plug. Has plastic clip on body for attaching to visor or pocket. Includes an adhesive backed holder for attaching to computer. Overall dimensions: 1.19" x 0.53" x 1.92" high. CAT # MIKE-54 \$1.25 each





MAGNETS

POWERFUL NEODYMIUM RARE EARTH MAGNETS

Neodymium iron boron (NdFeB), rare-earth magnets have magnetic properties far exceeding those of the Alnico and Ceramic magnets. NdFeB magnets have ratings into the 45MGOe range as compared to the Samarium Cobalt in the 32MGOe range and Alnico or Ceramics in the 8MGOe range. Because of the high strength of Neodymium magnets, and to prevent injury to people or equipment, care must be taken when handling these around other magnets or metal objects. CAUTION! These magnets are fragile and will shatter.

POWERFUL NEODYMIUM

This is the most powerful neodymium magnet we have. 1.74" X 1.43" X 0.24" thick. Slightly curved with an arc of about 20 degrees. Be careful around other magnets and iron. **CAT# MAG-23** \$5.50 each

IRREGULARLY SHAPED NEODYMIUM MAGNET

Aprox. 1.86" X 1.02" X 0.08" thick. **CAT# MAG-26** \$1.50 each 25 for \$31.25 • 100 for \$100.00



0.95" x 0.42" x 0.13" thick. Flat on one side; slight curvature on one side. **CAT # MAG-67** \$ 1.00 each

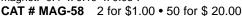


SMALL RECTANGULAR BLOCK

0.35" x 0.28" x 0.22" shiny-coated neodymium block. May have some chipped corners. **CAT # MAG-72** 75¢ each • 10 for 50¢ each

SMALL NICKEL-PLATED

Shiny, nickel-plated neodymium magnet. 0.4" x 0.19" x 0.05".



SHINY NEO-DISC

For its size, the most powerful magnet we've sold. Shiny, nickel plated neodymium disk, 0.5" dia. x 0.095" thick with a center hole of 0.1" dia. Weighs 2.5 grams and can lift over 1000 times its weight. Rated for up to 150 deg C.

CAT # MAG-71 75¢ each

32 pieces for 50¢ ea. • 512 pieces for 40¢ ea.

CERAMIC MAGNETS

1/2" ROUND CERAMIC MAGNET

0.5" diameter x 0.2" thick ceramic magnet with 0.1" hole in the center. **CAT # MAG-68**



10 for \$1.00 • 100 for \$7.50

0.7" ROUND CERAMIC MAGNET

0.7" diameter x 0.2" thick ceramic magnet.

CAT # MAG-70

5 for \$1.00 • 100 for \$15.00

1.75" DIAMETER CERAMIC MAGNET

Powerful 1.75" dia. x 0.2" thick ceramic magnet. Removed from unknown application. Clean.

CAT# MAG-73 75¢ each • 10 for 60¢ each

TIMERS

THE ONE MINUTE TIMER

When the big blue button is pressed the 4 LEDs light and the beeper pulses. As the seconds pass the beeping increases in frequency and the LEDs go out, one at a time until, at the end of 60 seconds, none are lit and the beeper holds a steady tone ending followed by a squelch. The timer can be stopped in the middle of a cycle by pressing the button. Ivory plastic box with blue button. 3.24" square x 2" high. Operates on 9 Volt battery, not included.

CAT # TMR-4 \$ 2.25 each 100+ \$1.50 each • 1000+ \$1.00 each

DIGITAL ON-TIMER

Digital timer from Mr. Coffee™, coffee maker. Ideal for use in any product that needs to be turned on automatically at a specific time. Operates on 120 Vac. Switch loads ups to 10 amps. Can be switched manually.

White plastic face. 2.48" X 1.77", with four digit LED clock. Overall size: 2.48" X 2.17" X 1.88" deep behind face. 0.25" qc terminals. Easy to connect and operate. Includes instruction sheet.

CAT# MCT-3 \$5.00 each

2 HOUR MECHANICAL TIMER

Timetech # TT-1663. Spring-wound mechanical 2 hour timer shuts off equipment or lights after prescribed interval up to 2 hours. Normally-open contacts. Turn shaft clockwise to activate device. Contacts rated 15 Amps @ 250 Vac. 2.28" x 2" x 1.2" thick plastic housing. 0.25" qc or solder terminals. Metal 6mm diameter half-moon shaft. Brass 8mm threaded bushing. UL, CSA. CAT # TMR-7 \$ 4.50 each

ELAPSED TIME INDICATOR

Curtis Instruments # 420-LNA
24 Vdc, 0-150 hour elapsed time indicator. Electrochemically operated meter monitors the actual use time of equipment. Non-resettable. 2.18" x 0.6" x 0.25". Self-sticking adhesive backing. 9" wire leads.

CAT# ETM-420 75¢ each • 100 for \$60.00

METAL DETECTOR

Comb beaches, sweep hillsides, ghost towns and construction sites with this inexpensive metal detector for beginning prospectors. Also good around the house for locating pipes and studs in walls.

ses and This one is sensitive enough to detect a coin at a depth of up to 6" and much deeper for larger objects. Has controls to adjust volume and sensitivity. A "find" is indicated by a meter and change in speaker volume. Has a 1/4" phone jack for headphone (not included). Adjustable stem. Requires six AA volt batteries (not included). CAT# MDR- 2 \$37.95 each

FASTENERS

INSULATED CRIMP TERMINALS

DISCONNECT	MAI = 4/4"

	CAI#	WIRE SIZE	COLOR	50 PCS	100 PCS	500 PCS	1,000 PCS
	2125	22-18	RED	2.50	4.50	20.00	32.00
لللث	2225	16-14	BLUE	2.50	4.50	20.00	32.00
	2325	12-10	YELLOW	3.00	5.50	26.00	50.00

QUICK DISCONNECT FEMALE 1/4"

CAT#	WIRE SIZE	COLOR	50 PCS	100 PCS	500 PCS	1,000 PCS
1125	22-18	RED	2.50	4.50	20.00	32.00
1225	16-14	BLUE	2.50	4.50	20.00	32.00
1325	12-10	YELLOW	3.25	6.00	27.50	52.00

QUICK DISCONNECT FEMALE 3/16"

CAI#	WIRE SIZE	COLOR	50 PCS	100 PCS	500 PCS	1,000 PCS
1150	22-18	RED	2.50	4.50	20.00	32.00
1250	16-14	BLUE	2.50	4.50	20.00	32.00

FULLY INSULATED MALE 1/4"

сат# 4125	wire size 22-18	COLOR RED	50 PCS 4.50	100 PCS 8.00	500 PCS 35.00	1,000 PCS 60.00
4225	16-14	BLUE	4.50	8.00	35.00	60.00

FULLY INSULATED FEMALE 1/4"

6125	wire size 22-18	COLOR RED	50 PCS 4.50	100 PCS 8.00	500 PCS 35.00	1,000 PCS 60.00
6225	16-14	BLUE	4.50	8.00	35.00	60.00

PIGGY-BACK 1/4"

3125 3225	wire size 22-18 16-14	COLOR RED BLUE	50 PCS 2.50 2.50	500 PCS 20.00 20.00	1,000 PCS 32.00 32.00

BUTT CONNECTORS

	5100	WIRE SIZE 22-18	COLOR RED	50 PCS 2.50	100 PCS 4.50	500 PCS 20.00	1,000 PCS 32.00
	5200	16-14	BLUE	2.50	4.50	20.00	32.00
	5300	12-10	YELLOW	3.25	6.00	27.50	52.00
ENDCA	DC						

,,	•					
\sim	CAT#	WIRE SIZE COLOR	50 PCS	100 PCS	500 PCS	1,000 PCS
	0100	22-18 NATURAL	2.50	4.50	20.00	32.00
	0200	12-16 NATURAL	2.50	4.50	20.00	32.00
	0300	16-14 NATURAL	2.75	5.00	23.00	40.00

FULLY INSULATED MALE BULLET CONNECTORS

	CAT#	WIRE SIZE	COLOR	50 PCS	100 PCS	500 PCS	1,000 PCS
_	5400	22-18	RED	2.50	4.50	20.00	32.00
	5500	16-14	BLUE	2.50	4.50	20.00	32.00

FULLY INSULATED FEMALE BULLET CONNECTORS

сат# 5600	wire size 22-18	color RED	50 PCS 3.25	100 PCS 6.00	500 PCS 27.50	1,000 PCS
5700	16-14	BLUE	3.25	6.00	27.50	52.00

SPADE TERMINALS

	CAI#	WIRE SIZE	COLOR	STUD SIZE	30 PCS	100 PCS	300 PC3	1,000 PCS
	9106	22-18	RED	6	2.50	4.50	20.00	32.00
\mathbb{N}	9108	22-18	RED	8	2.50	4.50	20.00	32.00
\Box	9110	22-18	RED	10	2.50	4.50	20.00	32.00
П	9206	16-14	BLUE	6	2.50	4.50	20.00	32.00
	9208	16-14	BLUE	8	2.50	4.50	20.00	32.00
	9210	16-14	BLUE	10	2.50	4.50	20.00	32.00
	9308	12-10	YELLOW	8	3.25	6.00	27.50	52.00
	9310	12-10	YELLOW	10	3.25	6.00	27.50	52.00
RI	NG TI	ERMIN	ALS					
	CAT#	WIRE SIZE	COLOR	STUD SIZE	50 PCS	100 PCS	500 PCS	1,000 PCS

	8106	22-18	RED	6	2.50	4.50	20.00	32.00
\bigcirc	8108	22-18	RED	8	2.50	4.50	20.00	32.00
Y	8110	22-18	RED	10	2.50	4.50	20.00	32.00
Д	8206	16-14	BLUE	6	2.50	4.50	20.00	32.00
ш	8208	16-14	BLUE	8	2.50	4.50	20.00	32.00
	8210	16-14	BLUE	10	2.50	4.50	20.00	32.00
	82516	16-14	BLUE	5/16	3.25	6.00	27.50	52.00
	8308	12-10	YELLOW	8	3.25	6.00	27.50	52.00
	8310	12-10	YELLOW	10	3.25	6.00	27.50	52.00
	83516	12-10	YELLOW	5/16	3.75	7.00	30.00	55.00

QUICK SPLICE

сат# 7100	wire size 22-18	color RED		100 PCS 10.00	500 PCS 47.00	1,000 PCS 75.00
 7200	16-14	BLUE	5.50	10.00	47.00	75.00

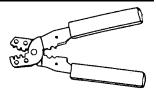
130 PIECE CRIMP TERMINAL KIT



This kit contains an assortment of 130 crimp style connectors. Included in the set are push-on type connectors, spade type connectors, in-line connectors and full round connectors. Complete set including a crimp tool and plastic storage box.

CAT# CRPKT-130 \$7.25 per set

CRIMP TOOL



Designed to be used to crimp "D" sub pins, 22-28 AWG, butt connectors and small solderless connectors.

CAT # CT-1 \$7.50 each

TELECOM CONNECTORS

For 19- 26 AWG wire. Simply put wires in place and push button with pliers or crimping tool. Filled with silicone gel to insulate and improve conductance.

2-WIRE BUTT SPLICE - YELLOW **CAT # UYC** 10 for \$2.00 50 for \$7.50 100 for \$11.00

3 -WIRE BUTT SPLICE - RED **CAT # URC** 10 for \$2.50 50 for \$10.00 100 for \$14.00

TAP CONNECTOR Allows user to tap

directly into an existing wire without cutting. CAT # UBC 10 for \$2.50 50 for \$10.00 100 for \$14.00

IN-LINE SPLICE CAT # BSL-2 10 for 75¢

50 for \$3.00 100 for \$5.50

WIRE SADDLES

WIRE SADDLE WITH ADHESIVE BACKING

White nylon wire harness saddle. 1" x 0.56" base saddle. 1" x 0.56" base with adhesive backing. Holds wires and bundles of wires up to 0.22" diameter. **CAT# WH-9** 100 for \$6.00

1000 for \$40.00

CABLE TIES

CAT#	LENGTH	MIN. TENSIL STRENGTH	COLOR	MAX. BNDL DIA.	10	100	1000
TR-400	4"	18 lbs	neutral	15/16"	.30	\$2.50	\$15.00
TR-400B	4"	18 lbs	black	15/16"	.35	\$3.00	\$17.50
TR-600	6"	30 lbs	neutral	1 1/2"	.50	\$4.00	\$30.00
TR-600B	6"	30 lbs	black	1 1/2"	.50	\$4.00	\$30.00
TR-800	8"	50 lbs	neutral	1 3/4"	.60	\$5.00	\$40.00
TR-800B	8"	50 lbs	black	1 3/4"	.70	\$6.00	\$50.00
TR-1100	11"	50 lbs	neutral	3"	.70	\$6.00	\$50.00
TR-1100B	11"	50 lbs	black	3"	.80	\$7.00	\$60.00
TR-1500	15"	50 lbs	neutral	4"	\$1.00	\$8.00	\$70.00

ADHESIVE-BACKED **TIE MOUNTS**

These tie mounts are used to hold the above tie wraps to a flat surface.



3/4" square 10 - 40 lbs ties CAT# TM-1 10 for \$1.20 100 for \$9.50 1000 for \$85.00 18 - 50 lbs ties CAT# TM-2 100 for \$10.00 1" square 10 for \$1.40 1000 for \$95.00

WIRE NUTS

SIZE	COLOR	CAT#	50	100	500	1000
Fits 18-28 ga. wire	Grey	WN-1	\$2.00	\$3.50	\$15.00	\$25.00
Fits 18-24 ga. wire.	Blue	WN-2	\$3.00	\$5.50	\$25.00	\$45.00
Fits 16-22 ga. wire	Orange	WN-3	\$3.75	\$7.00	\$32.50	\$60.00
Fits 18-12 ga. wire	Yellow	WN-4	\$3.75	\$7.00	\$32.50	\$60.00

THREADED HEX STANDOFFS

(Male to Female)	(F	emale to Fer	nale)
M-F STYLE	,	F STYLE	200-200
		Į.	
A= Aluminum	B=Brass	N=Nylon	S=Steel
A- Alullillulli	D-D1033	14-14y1011	0-0teei

A=	Alumi	num	B=B	rass	N=Nylon	S=S	iteel
<u>Length</u>	<u>Dia.</u>	Mat.	<u>Style</u>	Thread	CAT#	<u>10</u>	<u>100</u>
0.32"	0.25"	Ν	F-F	4-40	SP-110	0.90	5.00
0.5"	0.2"	S	F-F	4-40	SP-124	1.00	8.00
3.53"	0.2"	Α	F-F	4-40	SP-78	2.50	20.00
0.3"	0.25"	S	F-F	6-32	SP-116	1.00	8.00
0.5"	0.25"	В	F-F	6-32	SP-123	1.00	8.00
0.9"	0.25"	S	M-F	6-32	SP-122	1.50	10.00
1"	0.25"	S	M-F	6-32	SP-8	1.50	10.00
1.75"	0.25"	N	M-F	6-32	SP-95	1.50	10.00
3"	0.25"	В	F-F	6-32	SP-87	2.50	17.50
1.125"	0.25"	Α	M-F	8-32	SP-14	1.50	10.00
2.25"	0.30"	Α	M-F	10-32	SP-130	2.00	15.00
0.75"	0.25"	Α	F-F	3MM	SP-90	1.00	8.00
1"	0.22"	В	M-F	3MM	SP-15	1.50	10.00
0.63"	0.25"	S	M-F	5MM	SP-89	1.00	8.00

SHOULDER STANDOFF, 4-40 THREAD

1/4" x 1/4" hex standoff with 4-40 female thread. 0.2" long shoulder fits 0.2" dia. hole.

CAT# SP-126 10 for \$1.00

100 for 7¢ each • 1000 for 5¢ each

0.75" NYLON HOLE PLUG

Black nylon hole plug for 0.75" dia. chassis hole. CAT# HPL-0.75 10 for \$1.00 • 100 for \$5.50



SPLIT-LOOM TUBING

Dress up auto and home installations with split-loom tubing.



<u>DIA.</u>	<u>COLOR</u>	CAT#	<u>PER</u>	<u>100</u>
			FOOT	FOOT
1/4"	black	SLT-14	12¢	\$9.00
3/8"	black	SLT-38	15¢	\$10.00
1/2"	black	SLT-12	19¢	\$12.00
5/8"	black	SLT-58	25¢	\$18.00
2/4"	black	CI T-21	204	\$19 AA

Minimum order 10' of one size.

NON-THREADED SPACERS

ADI	ED SPAC	EKO		
num	N = Nylon	K = B	akelite	

A = Aluminum N = Nylon					K = B	akelite	
Length	Dia.	Mat.	<u>Hole</u>	CAT#	<u>10</u>	<u>100</u>	<u>1000</u>
0.19"	0.5"	Ν	#10	SP-107	0.80	5.00	35.00
0.25"	0.25"	Ν	#8	SP-42	0.80	5.00	35.00
0.25"	0.30"	Ν	#6	SP-96	0.80	5.00	35.00
0.375"	0.375"	K	#8	SP-99	0.50	4.00	25.00
0.38"	0.25"	K	#8	SP-101	0.50	4.00	25.00
0.50"	0.25"	Ν	#8	SP-58	0.90	5.50	40.00
0.6"	0.13"	Ν	18awg	SPC-5	0.40	3.00	20.00
0.62"	0.25"	Ν	#8	SP-66	0.95	5.75	42.50
0.625"	0.31"	K	#10	SP-100	0.65	4.50	30.00
0.625"	0.32"	Ν	#10	SP-108	1.00	6.00	45.00
0.63"	0.25"	Ν	#6	SPC-2	0.65	5.00	40.00
0.69"	0.37"	Ν	#8	SP-106	1.00	6.00	45.00
0.75"	0.25"	Ν	#8	SP-74	1.00	6.00	45.00
0.75"	0.30"	Ν	#8	SP-105	1.00	6.00	45.00
0.87"	0.31"	Ν	#8	SP-118	1.00	6.00	45.00
0.89"	0.38"	K	#8	SP-119	0.75	6.00	45.00
1.5"	0.25"	Α	#6	SP-10	1.50	10.00	80.00

CIRCUIT BOARD SUPPORTS

all the circuit board supports below are priced: 20 of one style \$1.00 • 100 of one style \$4.00 1000 of one style \$20.00

0.25" HIGH. Snap mounts in 0.187" diameter hole. CAT# CBS-11



0.31" HIGH. Richco # MSPE-5-01. Snap-mounts into 0.125" dia. holes.

White nylon. CAT # CBS-7

0.43" HIGH. Richco # MSPM-7-01. Snapmounts into 0.125" diameter holes. White nylon CAT # CBS-6

0.5" HIGH. Snaps into 0.125" diameter hole. CAT# CBS-12 White nylon.

1.12" HIGH. Richco# DLMSP-18-01. Snap-mounts in 0.156" dia. hole. White nylon. CAT# CBS-9

Nylon circuit board supports snap into 0.187" hole in chassis. 3/4" high.



CAT# CBS-5

0.4" high x 0.2" diameter hex standoff. One end snap-mounts into 0.156" dia. hole. The other end has a 6-32 male thread. CAT # CBS-10

ROTATING PARTS (GEARS, PULLEYS, BELTS, O-RINGS)

MINIATURE ROLLER CHAIN



25 roller chain.

Works with 1/4" pitch chain sprockets below.

CAT # CHN-25 \$ 2.25 per foot

MASTER LINK for # 25 roller chain CAT # ML-25 \$1.00 each

1/4" PITCH SPROCKETS

Glass-reinforced nylon sprockets for use with # 25, 1/4" pitch roller chain. Sprockets are designed for press-fit use, but collars have ample room to be tapped for set screws.

TOOTH	BORE	CAT#	PRICE
11	5/16"	GR-23	\$1.25
12	1/4"	GR-18	\$1.25
13	1/4"	GR-19	\$1.25
25	5/16" (flatted)	GR-72	\$ 1.50
42	5/16" (flatted)	GR-73	\$ 1.75

METAL 16 TOOTH CHAIN GEAR

For #25 roller chain. 3/8" flatted bore.

CAT # GR-75 \$ 1.25 each



MATING GEARS

All of the following gears and sets of gears, with the exception of CAT # GR-27, mate with one another

5 GEAR ASSORTMENT

Five matched break-resistant plastic gears ranging from a 0.44" dia.(10 teeth) to 饊 2.02" (50 teeth).

Gears are molded with 0.15" (4mm) bores and come with inserts which reduce the

bore to 0.065" (2mm) diameter. CAT# GR-5

\$2.75 per set - includes 5 gears and 5 inserts

10 sets for \$20.00

Two black composite plastic gears. 64 teeth: 2.6" diameter x 0.4." 0.4" (10mm) bore. 36 teeth: 1.48" diameter x 0.23.' 0.32" (8mm) bore.

CAT# GR-68 \$1.65 per set

34 tooth composite gear with 3/8" diameter aluminum bore. 1.4" dia. x 0.5" thick. Collar extends 0.25" beyond gear.

CAT # GR-79 \$ 1.00 each

16 TOOTH GEAR

Black composite gear.16 teeth. 0.7" diameter. 0.25" bore. CAT# GR-64 75¢ each

27 COG IDLER GEAR

Ball bearing idler gear with 6mm (0.24") bore. 27 teeth. 1.14" diameter x 0.48" thick.

CAT # GR-71 \$ 2.00 each

20 TOOTH NYLON GEAR

Nylon gear. 0.85" dia.x 0.32" wide. 0.32" dia.bore. Collar extends 0.3" beyond gear. CAT# GR-82 75¢ each

12 COG GEAR 0.58" diameter x 0.48" thick. 0.1" collar. 0.2" dia. flatted bore. CAT # GR-74 50¢ each



32 COG GEAR

1.34" diameter x 0.48" thick. 0.36" collar. 0.325" dia. bore. CAT # GR-70 \$ 1.25 each



COMPOUND GEAR

Black plastic compound gear. The smaller gear is 0.28" wide, has 14 teeth and a diameter of 0.53". The larger gear is 0.46" wide, has 21 teeth and a diameter of 0.77". 6 mm (0.24") bore.

CAT # GR-78 50¢ each

MATING GEARS W/ SHAFT

32 cog gear is attached to a 5/16" dia. x 1.5" shaft. The mating 28 cog gear fits the opposite, flatted end of the shaft. CAT # GR-76



\$ 1.75 per set

BEVELED MATING GEARS

Mating, beveled gears. Black composite. One is a 36 tooth gear, 1.23" diameter x 0.35" wide with flatted 0.32" bore. The other is a compound gear - the larger part has 46 teeth and is 1.56" diameter x 0.47" wide - the smaller part has 26 teeth and is 0.9" dia. x 0.71" wide. It has a brass reinforced 0.31" bore.

CAT # GR-27 \$1.50 per set

METAL COMPOUND GEAR

Metal gear with 0.1" bore. Overall & thickness, 0.25". 0.67" dia. outer gear, 32 cogs, 0.5" pitch. 0.27" dia. inner gear, 10 cogs, 0.5" pitch.

CAT # GR-83 \$ 1.00 each

COGBELT AND TWO PULLEYS

21" circumference x 0.25" wide cogbelt with two pulleys. Large plastic pulley has 60 cogs and is

1.45" diameter. The small pulley is metal and has 27 cogs and is 0.66" in diameter. Both have 5/16" flatted bores. The small pulley has a hole for a set screw. Removed from equipment.

CAT # PA-4 \$ 3.00 per set

SYNCHRONOUS DRIVE "XL" GEARBELT

1/5" PITCH 1/4" WIDE

40 Teeth 80XL025 CAT # CGB-40



SPRING WRAPPED SLIP COUPLINGS

Stainless steel spring wrapped couplings for connecting shafts of two different sizes.

0.25" AND 0.375" BORES

Sterling Instr., (SDP/SI) # S9941Y-SWC13A46. 1.43" overall length. Outside diameter: 1.25" 0.62" bore depth.

CAT# FC-13 \$3.50 each

0.1875" AND 0.25" BORES

Slip at 48 oz in. 6-32 set screws.

Sterling Inst., (SDP/SI)

S9941Y-SWC10A34. 1.26" overall length. Outside dia.: 1". 0.550" bore depth. Slip at 20 oz in. 4-40 set screws. **CAT # FC-10** \$3.50 each

E-Mail Us - allcorp@allcorp.com













DC MOTORS

TINY VIBRATING MOTOR

Low voltage, low current miniature vibrating motor. Operates on 1.5 - 3 Vdc. Tiny motor with offset weighted shaft is used in cell phones and pagers for vibrating alert signal. Remove the weight and they're great for many model and robotics applications. A clear silicone boot surrounds the motor and provides a flat, shock-mounting surface. Without the silicone boot the motor measures 0.16" dia. x 0.5" long. The shaft and weight extend another 0.3." Connection is via two gold-plated solder pads.

CAT # DCM-179 \$ 1.75 each 100 for \$ 100.00 10 for \$ 15.00

MINIATURE VIBRATOR

Sanko Electric # 1E120. 0.55" dia. x 0.135" thick miniature enclosed vibrating motor. Used as a signaling device in pagers and cellphones. Operates on 3 Vdc. Solder pad terminals.

CAT # VB-1 \$ 1.25 each

MINIATURE DC MOTOR

Mabuchi # FF-N20PN/ Miniature 1.5 to 3 Volt DC motor. Ideal for models and radio control applications where small size is important. No load rating: 15,800 RPM @ 2.4 V, 96 mA. Length (excluding shaft), 0.654" long x 0.47" x 0.39". 0.039"(1mm) diameter x 0.13" long shaft. Solder-loop terminals. Large quantity available. CAT # DCM-166 2 for \$1.50 • 150 for 60¢ each 600 for 50¢ each • 1500 pieces 35¢ each

1 1/2 - 3 VDC MOTOR

Dual shaft motor operates well = on 1.5 to 3 Vdc. 3/32" diameter shaft is 0.58" long on one side and 0.4" long on the other. Motor is 1.08" diameter X 1.47" long. Solder loop terminals.

CAT# DCM-75 \$1.35 each • 10 for \$11.50

3 - 6 VDC MOTOR

Johnson Motor. 0.78" x 1" x 1.38" long. 0.08" (2mm) x 0.33" long shaft. Solder terminals. CAT# DCM-189 2 for \$ 1.50



16120

3 - 6 VDC MOTOR

Mabuchi RS-550PF. Good-quality motor with internal cooling fan. No-load rating: 9000 RPM @ 6 Vdc, 1.3 Amps. 1.47" diameter x 2.25" long. 0.13" diameter shaft is 0.63" long. CAT # DCM-104 \$3.50 each



3 – 12 VDC MOTOR

Mabuchi Motor. Small DC motor. Operates between 3 – 12 Vdc. 0.93" dia. x 1.2" long. 0.078" (2 mm) dia. x 0.27" long shaft. Motor is prepped with a 9 volt battery clip on 6" leads.



CAT # DCM-155 2 for \$ 1.50

6 VDC MOTOR

Mabuchi # RF-510T. Quiet, low-current DC motor typically used in audio equipment, CD, DVD, tape or VCRs. No load specs: 2800 RPM @ 6 Vdc, 10 mA. 1.25" dia. x 1.07. Shaft is 2mm dia. (0.08") x 0.42" long. Solder terminals.

CAT# DCM-176 \$1.50 ea. • 200 for \$200.00

6 VDC MOTOR

Johnson # 63706. Powerful little motor with internal cooling fan. No load rating: 1200 RPM @ 5.8 VDC @ 1.26 Amps. 1.46" dia. x 2.54" long. 0.125" dia. x 0.35" long shaft. Solder or 0.187" qc terminals. CAT# DCM-165 \$3.50 each

6 VDC MOTOR

Mabuchi# RS540SH. Good-quality reversible DC motor. No load specs: 1100 RPM @ 6 Vdc @ 1 Amp. 1.41" diameter x 2.15" long. 0.125" diameter x 0.3" long knurled shaft.

CAT # DCM-136 \$3.50 each

Case of 90 for \$2.50 each

6-12 VDC VIBRATING MOTOR

Panasonic "Micro-motor" # AKME-BC 1 0.59" x 0.79" x 1.15" long vibrating motor. 0.31" long x 0.08" (2mm) dia. shaft has a 0.43" 1/2 moon weight. Operates on 6-12 vdc. 1" wire leads. CAT# DCM-184 \$1.25 each • 10 for \$ 1.00 each 100 for 85¢ each • 500 for 65¢ each

TWO-SPEED VIBRATING MOTOR

3 Vdc (1.5-6 Vdc) motor with a relatively heavy offset weight which vigorously shakes the motor when voltage is applied. Motor is prepped with a 3-position slide switch with

positions for off, slow and fast. Also included are elements of a battery holder. Motor is 1.35" long x 0.94" x 0.72." Shaft is 2mm (0.07") dia. x 0.4" long. Weight is removable from motor shaft.

CAT# DCM-185 \$1.25 ea. • 10 for \$1.00 ea. 100 for 85¢ each • 500 for 65¢ each

12 - 24 VDC MOTOR

Johnson Electric. Small permanent magnet DC motor operates on 12 - 24 Vdc.

No load speed: 5000 RPM @ 24 vdc, 85 mA. 2500 RPM @ 12 vdc, 14 ma. 0.95" x 0.72" x 1.21" long. 2 mm x 10 mm long shaft. Prepped with black and red 1.8" long leads terminated with 0.125" qc connectors.

CAT # DCM-100 2 for \$1.50 • 100 for \$60.00

12 - 36 VDC MOTOR

Johnson Motor. Quiet, smooth operation from 12-36 Vdc. No load spec: 3780 RPM @ 24 Vdc @ 32 mA. 0.967" diameter x 1.21" long. Shaft is 0.08"(2mm) diameter x 0.73" long. Solder terminals.

CAT # DCM-141 \$1.25 each

24-36 VDC MOTOR

Mabuchi # RS-775VB.

Quiet, powerful, permanent magnet DC motor. Operates smoothly over a range of 12 – 48 VDC. No-load specs: 2400 RPM @ 24 VDC @ 110 mA. Body is 1.75" diameter x 3" long. Shaft is 5 mm (0.12") dia. x 0.5" long. A 0.32" dia. aluminum sleeve press-fit over the end of the shaft. Motor is prepped with 12" long leads with a ferrite bead.

CAT # DCM-138 \$ 3.75 each



2-9 VDC MOTOR

Samhongsa DHBA
Quiet running DC motor.
0.94" dia. x 0.5" body.
0.08" (2mm) dia. x 0.4" long shaft.

2250 RPM @ 2 Vdc, no-load rating. Has both 1.5" wire leads and solder terminals.

DCM-196 \$1.25 each • 10 for 90¢ each

1.5-9 VDC MOTOR

Mabuchi # RF-500TB-14415
Quiet, low-current motor typically used in audio equipment, CD, DVD tape or VCRs. No load specs: 1800 RPM @ 3 Vdc, 0.022 Amps / 3700 RPM @ 6 Vdc, 0.28 Amps. 1.25" diameter x 0.9." 0.08" (2mm) diameter x 0.34" long shaft. Solder terminals.

CAT # DCM-197 \$ 1.50 each 10 for \$ 1.00 each



DC GEAR MOTORS

MINI-RIGHT ANGLE GEARHEAD MOTOR w/ CONTROL CIRCUIT

Omron # R2DG-41. These unusual little motors have built-in control circuits that allow them to be used in a continuous or a pulsed mode. In continuous mode the final drive gear turns at 22-45 RPM(3-6 Vdc). In the pulsed mode final drive gear turns are reveal trips each time.

at 22-45 RPM(3-6 Vdc). In the pulsed mode the final drive gear turns one revolution each time the controller is momentarily pulsed. The motor assembly is 1.75" x 1.25" x 0.5" overall. The nylon final gear is 0.62" dia. and has a little nipple slightly off-center to which a small push-rod could be attached. Motors are in good condition, removed from equipment. Hook-up instructions included. Large quantity available.

CAT# DCM-110 \$3.25 each 10 for \$3.00 each • 100 for \$2.25 each

MOTOR W/ WORM GEAR ASSEMBLY

A smooth-running DC motor, flywheel and nylon gear train are built into this plastic assembly. The motor operates from 3-12 Vdc and rotates a worm gear which turns a 1.8" diameter circular gear. This gear drives a 1.3" nylon rod CUTAWAY VIEW back and forth 100 times per minute at 6 Vdc. Motor is a Mabuchi # RF-500TB-18280. It is 1.25" in dia. x 0.9" long. The motor/gear assembly is an integral part of the larger plastic assembly. It requires some cutting of the plastic in order to separate the motor/

24.5 VDC 115 RPM GEAR MOTOR

other applications. CAT # DCM-92 \$3.00 each

gear assembly from the rest of the unit for use in

Crouzet # 82-048-016. Small worm-gear driven motor operates from 9 - 32 Vdc. No-load rating: 115 RPM @ 24.5 Vdc @ 55 mA. Black plastic housing, 2.28" x 1.42" x 1.04." 0.25" dia. x 0.35" long flatted shaft. Included is a 2 pin female connector with 8" pigtail leads which works with the recessed male connector on the motor, but is not a perfect match. CAT# DCM-172 \$6.00 each

6 VDC GEAR MOTOR ASSEMBLY

Motor/gear-box assembly, removed in good condition, from rideable toy vehicle. Designed to operate on 6 Vdc, the assembly, enclosed in an unbreakable black plastic case, provides enough torque to move a child slowly around a room. The Mabuchi drive motor is, 3.5" long x 1.46" diameter with an internal cooling fan. The motor, itself, is encased in a removable breakresistant plastic outer cover which extends 3.25" beyond gearbox. Two styles:

STYLE 1:
Pear-shaped gearbox,
3.75" x
6.75" x
1.27."
Drive shaft is a slotted pentagonal nylon structure,
1.15" on a side, turning on a

2.17" diameter cylinder around a stationary 0.43" dia. nylon channel. The rotating structure extends 1" beyond the gearbox. The final drive rotates at 60 RPM @ 6 Vdc / 930 mA (no-load rating).

CAT # DCM-192 \$ 6.50 each

STYLE 2:

Oval-shaped gearbox, 8.5" x 4.8" x 2.75." Drive shaft is 1.77" diameter nylon sleeve with

slots. It rotates around a 1.3" diameter cylinder. Rotating structure extends

0.7" beyond gearbox. The final drive rotates at 60 RPM @ 6 Vdc / 1.7 Amps (no-load rating).

CAT # DCM-193 \$ 6.50 each

12 - 120 VDC WORM GEAR DRIVE MOTOR

CCL Motor # DE-25L.
This very unusual motor
has been prepped with a
full wave bridge rectifier for
use with 120 Vac. If you by

use with 120 Vac. If you bypass the bridge rectifier it works very nicely on any DC power from 12 volts on up. The final drive is a 0.8" long worm gear that turns a 0.8" dia. plastic gear at 120 RPM @ 12 Vdc (no load). Replaceable brushes. Motor body is 1.41" diameter x 2.75" long.

CAT# DCM-96 \$2.00 each • 10 for \$15.00

24 VDC GEARHEAD MOTOR

Merkle-Korff. Heavy-duty gearhead motor designed to drive a prison lockdown mechanism. Reversible, continuous duty motor, operates at 50 RPM @ 24 Vdc, 150 mA (no load). Will operate at lower voltages and RPMs. Diecast

gear box is 4.7" x 2.75" x 1.5" and has four 0.2" mounting holes on 2.4" centers. 2" dia. x 3" long drive motor. Output shaft is 0.5" dia. x 0.9" long and is on the same side of the gearbox as the motor.

CAT# DCM-175 \$ 21.50 each



6 RPM GEAR MOTOR

Molon # CHM-1205-5.
Powerful 12 Vdc, 6 RPM
gearhead motor. Gearbox is
3" x 2.75" x 0.83". Drive
motor and shaft are both on
the same side of the gearbox.
Shaft is 3.3" long, Top of shaft is
0.37" square. Base is 0.5" diameter.
Motor draws 130 mA at 12 Vdc, no load.
Motor protected by removable rubber cover.
CAT # DCM-164 \$ 12.00 each

GEARHEAD MOTOR AND

TURNTABLE ASSEMBLY
Heavy-duty, precision
turntable assembly
originally designed
for use in a satellite
dish positioning device.

for use in a satellite
dish positioning device.
Powered by a 12 Vdc
motor, the final rotational
speed is 5 RPM, with quite

a bit of torque. For a description of the motor see our CAT # DCM-177 below. The overall size of the turntable assembly, excluding motor, is 5.6" dia. x 1.84" thick. The outer portion of the turntable is stationary while the inner 3.28" disc rotates. The rotating disc is 1.38" thick including the heavy gear to which it is attached and has a rubber outer ring which serves to weatherproof it. It is tapped with four mounting holes.

CAT # DCM-178 \$ 31.95 each

TWO-SPEED WORM GEAR MOTOR

Powerful windshield wiper motor for 2000-2001
Saturn L series automobiles.
Two speeds; high speed is 106 RPM at 12 Vdc, 4 Amps.
Low speed is 41 RPM at 12 Vdc, 0.91 Amps. 3/8" threaded drive shaft with nut. A 2.25" lever with a universal joint, attached to the shaft, is easily removable. 7" overall length x 3.5" x 4". CAT # DCM-171 \$19.75 each

25 RPM GEARHEAD MOTOR

WITH BRAKE

Globe Motors # 409A582 Precision gearhead motor equipped with an electric

brake and a tach or positioning sensor. Brake must be energized to allow motor to rotate. Use of the brake enables precision starting and stopping. Brake can be easily disconnected if not required. Motor rated at 12 Vdc, brake at 24 Vdc. No load rating: 25 RPM @ 12 Vdc @ 130 mA. Motor functions well up to 24 Vdc. Overall size, excluding shaft, 5.15" long x 1.52" dia. 0.25" diameter x 0.9" long shaft equipped with a pressfit gear. Threaded mounting holes on gearhead face.

CAT# DCM-177 \$15.00 each

ASSEMBLY WITH 12 VDC MOTOR, GEARS AND PULLEYS

New assembly for a motorized magnetic card strip reader.
Driven by a Globe gear motor similar to DCM-151 with a speed of 130-140 RPM. A worm gear turns a pair of cog

pulleys linked by a cog belt. The rubber covered wheels pull a credit card past a magnetic head and two U-shaped optical sensors. Assembly includes motor, pulleys, belt, magnetic head and opto sensors. Mounted on an aluminum platform 6.25" x 2.75".

CAT # DCM-180 \$ 15.95 each

23.5 VDC GEARHEAD MOTOR

Buehler # 1.61.046.037.

No load rating: 16 RPM @ 23.5 Vdc @ 39 mA. Operates at 12 Vdc at slower speed.

Overall dimensions: 2.72" long x 1.4" diameter.

Overall dimensions: 2.72" long x 1.4" diameter. 0.2" diameter x 0.83" long flatted shaft. 6" leads. Used, removed from equipment in good condition.

CAT# DCM-191 \$13.50 each

24VDC, 50 RPM

Barber-Colman #EYQF-63604-750 No load ratings: 50 RPM @

24 VDC @ 50 mA. Manufacturer specs: 41.7/ 38.8 RPM with 80.5 oz-in load. 0.185" dia. x 0.75" long flatted shaft. Overall dimensions: 1.36" diameter x 2.92" long (not incl. shaft). Three 4-40 threaded mounting holes in face of motor.

CAT # DCM-150 \$14.95 each

24 VDC, 140 RPM

Barber-Colman #EYQF-63604-740.

No load rating: 140 RPM @ 24 Vdc @ 50mA. Manufacturer specs with 21 oz-in load: 129.5/ 85. 0.185" dia. x 0.75" long flatted shaft. Overall dimensions: 1.36" dia. x 2.72" long (not incl. shaft). Three 4-40 threaded mounting holes in face of motor.

CAT # DCM-151 \$11.95 each

LINEAR ACTUATOR FOR AUTO DOOR LOCK

12 Vdc motor-drive actuator for automotive door locks. Nylon plunger moves 0.75". Push or pull, depending on polarity. Includes mounting hardware and a 10" metal extension rod which fits through the hole in the end of the plunger. Overall dimensions of actuator accombly (actuated) 9.45"

dimensions of actuator assembly (retracted): 8.42" x 2.35" x 1.15". Rubber boot protects against moisture and dust. Pigtail leads.

CAT # DLA-1 \$5.50 each

AC MOTORS

115 VAC MOTOR

Small, relatively powerful 115 Vac Johnson motor.

1.5" dia. x 2.50" long, the motor has a 0.157" dia. shaft 0.57" long. 12,000 RPM (no load). Internal cooling fan. Solder terminals.

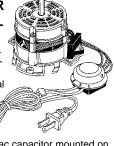
CAT# ACM-4 \$1.50 each

115 VAC FAN MOTOR W/ SPEED CONTROL

Lasko . 115 Vac 3-speed, shaded-pole fan motor. Requires moving air for continuous duty. Internal non-resettable thermal breaker. 3/8" dia. x 1" long flatted shaft. Motor is 3.77" dia. x 2.3" with an integral 5" diameter

mounting base. 3.5 uF, 250 Vac capacitor mounted on base. 1750 RPM, no-load speed. Includes 4-position rotary switch and 6' white 2-conductor power cord.

CAT# ACM-11 \$4.00 each



REDUCED

AC GEAR MOTORS

30 RPM, 120 VAC MOTOR

HTI # 111-0057. 120 Vac, 3 Watt timing-style motor. 1.95" diameter x 0.81" thick. 12" long wire leads. Mounting ears on two sides. 0.16" square shaft is 0.27" long. UL recognized.

CAT # ACM-105 \$2.50 each

40 RPM, 115 VAC MOTOR

Cramer Co # 105VA150-E. 40 RPM, 115 Vac gear motor. 1.83" diameter x 1.18" body. Mounting ears on 2.1" centers. 0.25" dia. x 1" long shaft. Prepped with a 1.25" long pin through the hole in the drive shaft. Pin is removable. 4" long pigtail leads. CAT # ACM-108 \$2.50 each

25 RPM 115 VAC GEAR **MOTOR W/ BRAKE**

Nidec 86BG4H4024G Powerful 25 rpm thermally protected 115 vac reversible gear motor. Built-in brake for

precision stopping. Can be disengaged by removing 5 springs. Requires 25-35 mfd capacitor. 5.33" long x 3.52" x 3.52" body not including shaft. 0.48" (12mm) dia. x 1.125" flatted shaft. Has three 4" wire leads.

CAT# ACM-114 \$37.50 each

230 VAC GEAR MOTOR WITH BRAKE

Nidec 86BG4P4022G Similar to the above motor, but rated at 24 rpm 230 vac. Requires 6 mfd capacitor. 5.33" long x 3.52" x 3.52" body

not including shaft. CAT # ACM-115 \$37.50 ea.

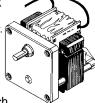
120 VAC GEAR MOTOR

ECM # 5588. Powerful 50 RPM gearhead on a shaded pole, C-frame motor. Intermittent duty cycle. Ideal for short duration tasks. Thermal protection automatically shuts down motor after about 4 minutes. Left alone, it will automatically start up again when it cools (approx. 5 minutes). 5/16" diameter x 0.6" long flatted shaft. Gearbox is 3" x 2.75" x 0.54" and has threaded mounting holes in four corners. Overall depth of motor is 3" excluding shaft.

CAT# ACM-110 \$6.00 each

240 VAC GEAR MOTOR

ECM # 5589. 40 RPM gearhead on a shaded pole, C-frame motor. Same dimensions as motor above. 240 Vac, 50 Hz. Operates at 40 RPM on 120 Vac as well, without the thermal shutdown kicking in. CAT# ACM-109 \$4.00 each



STEPPER MOTORS

AIRPAX STEPPER MOTOR

Airpax # C82711-M1. Unipolar, two phase stepper motor with 6 leads. 17 Vdc, 23.25 ohm coil. 7.5 degree per step. 2.25" dia. x 1" high. Two hole mounting flange, 2.75" centers. 0.25" dia. shaft is 0.6" long.



CAT # SMT-6 \$ 2.00 each

STEPPER MOTOR W/ PULLEY

Nidec # 44F5098005S, Unipolar, four phase stepper motor. 25 steps, 14.40 degrees/step. 1.95" dia. x 1.28 high". Attached to 0.22" long x 0.15" (4mm) diameter shaft is a 0.58" diameter aluminum pulley. Nine, two inch wire leads.

CAT# SMT-48 \$2.50 each

EPSON # SMM-6C

Unipolar, two-phase, 6 lead stepper motor. 0.98" dia. x 0.60" high body. 0.08" (2mm) dia. x 0.39" long shaft is fitted with 0.31" dia. gear with 12 teeth.

15 degree per step. Oval mounting flange has holes on 1.60" centers.16" long leads.

CAT# SMT-42 \$1.50 each

EPSON # SMM-20

Unipolar, two-phase, 6 lead stepper motor. 0.98" dia. x 0.60" high body. 0.08" (2mm) dia. x 0.15" long shaft is fitted with 0.22" dia. gear with 8 teeth. 15 degree per step. Oval mounting flange has holes on 1.30" centers. 18" long leads. CAT# SMT-43 \$1.50 each

1" DIA. STEPPER WITH GEAR

Bipolar, 4-lead stepper motor, 0.1" long shaft fitted with a 0.21" dia. 12 tooth gear. 1" dia. x 0.5" body. Oval mounting flange with holes on

1.25" centers. CAT # SMT-55 \$ 1.50 each

2.25" DIAMETER STEPPER

2.25" diameter x 0.52" thick stepper motor. Mounting flange with slotted holes on 3.15" centers.

0.4" long x 0.12" diameter shaft with a plastic corkscrew-like attachment. Five 2" leads.

CAT # SMT-53 \$ 2.00 each

1" DIAMETER STEPPER WITH THREADED SHAFT

Unipolar, 6-lead stepper motor. Oval mounting flange with holes on 1.35" centers. 1" diameter x 0.5." 0.14" diameter x 0.6" long threaded shaft. Thread removed from top 0.25" of shaft. 3" leads.

CAT # SMT-54 \$ 1.50 each

STEPPER MOTOR, 400 STEP

Minebea "Astrosyn" Type 17PY-Q202-03 Small precision bipolar stepper motor. 0.9 degrees/ step. 400 steps / revolution. 12.5 ohm coils. 1.66" x 1.66" x 0.92" body. 0.2" dia. x 0.4" long shaft. Four 2.25" leads w/ four pin socket connector, 0.1" spacing. CAT # SMT-46 \$6.75 each

HEAD ASSEMBLY W/ STEPPER MOTOR ADJUSTER

1" diameter stepper motor rotates worm gear to raise and lower a magnetic head assembly, probably from an audio or data tape drive. The worm gear part of this device might be useful for other applications. The motor is a 6 wire, unipolar

stepper. The travel of the worm gear is about 0.5". Mounted on a metal assembly 3.1" x 3.3."

CAT # EX-82 \$ 3.00 each

RELAYS

KH STYLE (ICE CUBE)

14 PIN (ICE CUBE) relays. All have clear or opaque plastic dust covers. Relay Size: 1.1" X 0.82" X 1.34" high



12 VDC, 4PDT

Omron # MY4 DC12. 12 Vdc, 160 ohm coil. 4PDT contacts rated 5 Amps @ 240 Vac/ 28 Vdc. Solder or socket mount terminals. UL, CSA. CAT # 4PRLY-12 \$ 4.00 each

10 for \$ 37.50 • 100 for \$ 340.00

12 VDC, 4PDT (USED)

Omron # MY4 DC12. Same specs as 4PRLY-12 above. Removed from working equipment. CAT # 4PRLY-12U \$ 2.50 each

10 for \$ 22.50 • 100 for \$ 200.00

24 VDC 4PDT

24 Vdc, 650 ohm coil. 4PDT, 3 amp contacts. Solder or socket mount CAT# 4PRLY-24N \$4.00 each

24 VDC, 4PDT PC MOUNT

Guardian # 1315P-4C-24VDC. KHU style relay. 24 Vdc, 680 ohm coil. 4PDT, 5 Amp contacts. PC leads. UL, CSA. CAT# 4PRLY-24PC \$2.00 each • 10 for \$17.50

120 VAC, 4PDT

Kest # KR1205N. 120 Vac, 4500 ohm coil. 4.P.D.T. contacts rated 5 A @ 240 Vac. Red LED indicator lights when coil is actuated. Solder/ socket mount terminals.

CAT # 4PRLY-120L \$4.00 each

AUTOMOTIVE / POWER RELAYS

SPDT 30 AMP

Orinco # JD191E-1510, 12 Vdc. 88 ohm coil. N.O. contacts rated 30A. N.C. contacts rated 20 amps. Plastic enclosed relay, 1.1" x 1.2" x 1" high. Plastic flange for bulkhead mounting. Mounts in standard automotive relay socket.

CAT # RLY-351 \$ 2.40 each • 10 for \$ 20.00

HALF-SIZE S.P.D.T. **AUTOMOTIVE RELAY**

Nais # JJM1-12V-H11 Miniature pc mount relay designed for automotive applications. S.P.D.T. contacts designed to switch 20 Amps on the N.O. side and 10 Amps on the N.C. side. Carry current, up to 33 Amps. 12 Vdc, 225 ohm coil. Plastic case sealed for immersion cleaning, 0.6" x 0.47" x 0.55" high. CAT # RLY-410 \$1.50 each

10 for \$12.50 • 100 for \$90.00

SPDT 20 AMP, SPECIAL

Ford # F57B-14B192-AA Small, plug-in automotive relay. S.P.D.T. contacts rated 20 Amps. 12 Vdc, 79 ohm coil. 0.89" x 0.59" x 1.05" case.

CAT # RLY-421 \$ 1.50 each



12 VDC 30 AMP S.P.S.T.

American Zettler # AZ971-1A-12DE Miniature 12 Vdc power relay designed for high in-rush, automotive applications. 12 Vdc, 90 ohm coil. S.P.S.T. contacts rated 30 Amps @ 30 Vdc. Vibration and shock resistant. Epoxy sealed polyester case. 1.03" x 0.83" x 0.82" high. PC pins. CAT # RLY-396 \$1.50 each • 10 for \$12.50 • 100 for \$90.00

SPECIAL LOW PRICE S.P.D.T 40 AMP RELAY

12 Vdc, 72 ohm coil. S.P.D.T. contacts rated for up to 40 Amps inrush current on the N.O. side. Standard 1.06" x 1.06" x 0.97" high polycarbonate case. 0.25" terminals fit standard automotive relay socket.

Disclaimer - For some unknown reason, the bottoms of these relays were sprayed red. To the best of our knowledge, there is nothing wrong with them. The terminals may require cleaning before use.

CAT# RLY-412 \$1.00 each • 100 for \$70.00

PC MOUNT POWER RELAYS

(15 Amps or greater)

6 VDC MINI-POWER RELAY

Hasco # KLT1C12DC6. S.P.D.T. miniature power relay. 6Vdc, 100 ohm coil. Contacts rated 15 Amps, N.O. and 12 Amps, N.C. Sealed pc mount package, 0.75" x 0.6" x 0.62" high. UL, CSA. CAT# RLY-415 \$1.50 ea. • 10 for \$1.25 ea.

12 VDC, SPDT

Potter & Brumfield# T90N5D12-12-07 12 Vdc, 100 ohm coil. SPDT contacts rated at 15 amps. 1.15" X 0.9" X 0.65". PC mounting. UL and CSA.

CAT# RLY-149 \$1.00 each • 10 for 80¢ each

12 VDC SPDT

ACC/AN Echlin # HR33A63S12 12 VDC, 379 ohm coil. S.P.D.T. contacts rated 15 Amps @ 120 VAC. 0.96" x 0.65" x 0.80" high. PC leads. UL, CSA. CAT# RLY-163 \$1.50 each 10 for \$12.50 • 100 for \$100.00



12VDC 16A

American Zettler # AZ942-1CT-12DE. Miniature enclosed power relay, 12 Vdc. 416 Ohm coil. Pc Pins.SPDT contacts rated 12 Amps @ 277 Vac, 16 Amps @ 250 Vac. Sealed plastic case: 0.86" x 0.63" x 0.65" high. UL. CAT# RLY-417 \$1.50 ea. • 10 for \$1.25 ea.

24 VDC, 70 AMPS

Potter & Brumfield # VF7-11H12-Z02 Small S.P.S.T., normally-open relay with 70 Amp contacts. 24 Vdc, 280 ohm coil. Black polycarbonate dustcover, 1.01" x 1.01" x 0.98" high. PC leads.

CAT # RLY-383 \$1.85 each • 10 for \$17.00

24 VDC, SPDT

Small, open-frame, pc mount power relay. Similar P&B T90 style relays. 480 ohm coil. Estimated contact current rating: 15 Amps.(min). 0.9" x 0.71" x 0.72" high. PC pins.

CAT # RLY-275 50¢ each • 10 for \$4.50

100 for \$40.00 • 1000 for \$300.00

24 VDC, SPDT

Potter & Brumfield # T90N5D12-24
24 Vdc, 675 ohm coil. SPDT contacts
rated 20 amps (N.O.), 10 amps (N.C.) @
240 Vac. 1.15" X 0.90" X 0.65". PC terminals.
UL and CSA. CAT# RLY-55 \$1.25 each
10 for \$10.00 • 100 for \$85.00

110 VDC, SPST N.O. 30 AMP

Aromat # JT1A-DC110V. 110 VDC, 12,760 ohm coil. 30 Amp S.P.S.T. normally-open contacts. 1.12" x 0.92" x 0.62" high. PC mount. UL, CSA. **CAT # RLY-339**

50¢ each • 10 for 45¢ each • 100 for 40¢ each



DIP RELAYS

Molded Epoxy Plastic case reed relay Mechanical Relay STYLE A STYLE B

Miniature mechanical and reed relays with pin configurations to fit standard DIP socket configurations (0.1" X 0.3" grid). Some are sealed for PC bath with vents that should be clipped after installation.

5 VDC D.P.D.T. DIP RELAY

NAIS # DS2Y-S-5VDC (STYLE B)
5 Vdc, 125 ohm coil. D.P.D.T. contacts rated 2 Amps (switching), 3 Amps (carry). Small sealed case, 0.787" x 0.390" x 0.366." Fits 16 pin IC socket DIP pattern. UL, CSA. CAT# RLY-413 \$1.25 each 10 for \$1.00 each • 100 for 85¢ each

9VDC RELAY, DPDT

Hasco# HS212 DC9. (STYLE B) 9 Vdc, 540 ohm sensitive coil. D.P.D.T. bifurcated contacts rated 2 Amps. Fully-sealed case, 0.78" x 0.38" x 0.41"high. Fits 16 pin DIP configuration. UL, CSA. **CAT# RLY-419** \$1.25 each • 100 for 85¢ each

12VDC DPDT DIP RELAY

Omron # G5V-2 12Vdc. (STYLE B)

12 Vdc, 288 ohm coil. D.P.D.T. bifurcated contacts rated 0.50 Amps @ 125 Vac /

2 Amps @ 30 Vdc. Fully-sealed case, 0.78" x 0.38" x 0.45" h. Fits 16 pin DIP configuration. UL, CSA.

CAT# RLY-420 \$1.50 ea. • 100 for \$1.00 ea.

12 VDC, S.P.S.T. N.O. (STYLE A) Gordos# 846A-4. 12 vdc, 575 ohm coil. Internal clamping diode (sealed). **CAT# DRLY-12** \$1.00 each

12 VDC, SPDT, SENSITIVE COIL

Fujitsu # FBR-211NC-D012-M (STYLE B)
Small SPDT relay. Contacts rated 2 Amps continuous (8 Amp inrush). 12 Vdc, 700 ohm, 0.2W sensitive coil. 0.6" x 0.4" x 0.42" high. PC pins in DIP configuration. Sealed for immersion cleaning. **CAT# RLY-375S**\$1.50 ea. • 100 for \$100.00

24 VDC - S.P.D.T. (STYLE B)

Aromat # HB1-DC24V 24 vdc, 1600 ohm coil. SPDT contacts rated 2 A 30 VDC/ 1 A 125 VAC. 0.787" X 0.433" X 0.642" high. **CAT # RLY-138** 75ϕ each • 10 for \$ 6.00 • 100 for \$ 45.00

MISCELLANEOUS RELAYS

3-6 VDC REED RELAY

AT&T # WE 345B. S.P.S.T., normally-open Treed relay. 312 ohm coil. Operates on 3-6 Vdc. Small, shielded metal-enclosed package, 1" x 0.29" x 0.25" high. PC leads. **CAT# RLY-395** 75¢ each 10 for \$6.50 • 100 for \$50.00

4.5 VDC SUB-MINIATURE RELAY

NEC# UA2-4.5NW. Tiny D.P.D.T. pc mount relay with contacts rated 1 Amp @ 30 Vdc. 0.224" x 0.417" x 0.354" high. 4.5 Vdc, 145 ohm coil. Pick-up voltage, 3.38 Vdc. UL, CSA. Large quantity available. CAT# RLY-405 75¢ each • 10 for 65¢ each 100 for 50¢ each • 1000 for 35¢ each

5 VDC REED RELAY

Hasco # 713-5. S.P.S.T., N.O. reed relay in an epoxy molded SIP package.
5 Vdc, 500 ohm coil. Contacts designed to handle up to 600 Vdc. 0.5 Amps max. switching.
2.5 Amps max carry current.
1.12" x 0.3" x 0.42" high. UL, CSA.

CAT # RLY-414 75¢ each

CAT # RLY-414 75¢ each 10 for \$ 6.00 • 100 for \$ 45.00

5-6 VDC REED RELAY

Wabash #1149-15-4. S.P.S.T. normally-open reed relay. 35 ohm coil. 1.13" x 0.39" x 0.34" high epoxy case.

CAT # RLY-406 75¢ each 10 for \$ 6.00 • 100 for \$ 45.00

5VDC SPST N.O. RELAY

Clare # DSS41A05. 5 Vdc, 450 ohm coil. S.P.S.T., normally-open. Contacts rated 0.5A, switching current, 2A carry current. 0.75" x 0.20" x 0.30"

2A carry current. 0.75" x 0.20" x 0.30" high. UL. **CAT# RLY-418** 75¢ each • 100 for 50¢ ea.

6 VDC, D.P.D.T. RELAY

Hasco # UJ2CPDC6. 6 Vdc, 40 ohm coil. D.P.D.T., 10 Amp contacts. Clear polycarbonate dustcover. 1.1" x 0.85" x 1.36." high. PC terminals. UL, CSA. CAT # RLY-416 \$ 2.75 each



9 VDC S.P.S.T. N.O. RELAY

OEG # OJ-SS-109TM. 9 Vdc S.P.S.T. normally open, 182 ohm coil. 3 amp contacts. 0.39" x 0.71" x 0.57" high. P.C. leads. UL. **CAT# RLY-409**

75¢ each • Tube of 25 pieces for 60¢ each 100 pieces for 50¢ each 1000 pieces for 40¢ each

9 VDC, S.P.D.T.

Potter & Brumfield # T70L5D-131-09 9 vdc, 225 ohm coil. PC mount, SPDT contacts rated 3 amps. Case, 0.86" X 0.63" X 0.93" high. UL and CSA.

CAT# RLY-264 \$1.25 each • 10 for \$10.00

12 VDC, SPST N.O.

OEG # SDT-SS-112DM. 12 Vdc, 270 ohm coil. SPST, normally open contacts. Rated 10A @ 250 Vac/24 Vdc. Sealed case. Small footprint. 0.95" x 0.4" x 0.98" high. PC pins. UL, CSA.

CAT # RLY-340 \$ 1.25 each 10 for \$10.00 • 100 for \$85.00

12 VDC REED RELAY

E.-T. # R7218-3. S.P.S.T. normally-open reed relay. 4650 ohm coil. 1.14" long x 0.34" diameter. In-line pc pins. UL, CSA. CAT # RLY-407 75¢ each

10 for \$ 6.00 • 100 for \$ 45.00





S.P.D.T. 12 VOLT RELAY

American Zettler # AZ4-1CH-12DE Small pc mount relay. S.P.D.T., 5 Amp contacts. 400 ohm, 12 Vdc coil. 0.85" x 0.63" x 0.72" high. Sealed for immersion cleaning. UL, CSA. CAT # RLY-370 \$1.50 ea. • 50 for \$ 60.00

24 VDC, S.P.N.O. RELAY

Takamisawa # VE24HM5K 24 Vdc. 1610 ohm coil. S.P.S.T. N.O. contacts rated 5 Amps @ 30 Vdc/ 250 Vac. 0.81" x 0.41" x 0.81" high. PC pins. UL, CSA. CAT # RLY-411 50¢ each



12 VDC, S.P.D.T.

Hasco# BAS511DC12. Mini sealed PC mount relay. 12 Vdc, 320 ohm coil. S.P.D.T. contacts rated 5 Amps. 0.61" x 0.41" x 0.44" high. PC leads. CAT # RLY-379 \$1.20 each • 100 for \$95.00

24 VDC S.P.D.T. 10 AMP

American Zettler # AZ 692H-1C-24D 24 Vdc, 1200 Ohm coil. S.P.D.T. contacts rated 10 Amps. Sealed case. 1.13" x 0.5" x 0.98" high. PC board mount. UL, CSA. CAT # RLY-334 50¢ each • 100 for \$ 35.00

24 VDC D.P.D.T. 10 AMP

Kest # KRLY-2024 24 Vdc, 625 ohm coil. D.P.D.T. 10 Amp contacts. KH "Ice cube" style, clear polycarbonate case. 1.1" x 0.83" x 1.37" high. Solder or 0.187" qc or solder terminals. CAT # RLY-2024 \$2.75 each



24 V.D.C. - SPDT

Fujitsu # FBR111NUD024-1 24 Vdc, 1,600 ohm coil. 3 amp @ 120 Vac / 28 Vdc contacts. Small sealed, immersion cleanable relay. 0.8" X 0.62" X 0.9" high. PC pins. UL listed.



CAT# RLY-91 \$1.00 each 10 for \$8.50 • 100 for \$65.00

24 VDC S.P.D.T. ALL PURPOSE RELAY

Guardian Electric # IR-645U-C-24D Open frame 24 vdc 200 ohm coil S.P.D.T relay. 10 amp contacts. Solder lug terminals. Mounting: 8-32 single screw. 1.80" x 1.07" x 1.65". CAT# RLY-408 \$1.00 each



24 VDC, 10 AMPS

American Zettler # AZ971-1A-24DE SPDT, 10 Amp contacts. 24 Vdc, 370 ohm coil. 1" x 0.81" x 0.83". PC pins. CAT # RLY-327 \$1.75 each



24 VDC. 12 AMP SPDT RELAY

Song Chuan # 812H-1C-C-24DC 24 Vdc, 1645 ohm coil. SPDT contacts rated 12 Amps @ 125 Vac, 7 Amps @ 30 Vdc. Flux-tight case, 0.82" x 0.63" x 0.64" high. PC mount. UL, CSA. CAT # RLY-381 \$1.35 each

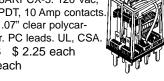


24 VDC 10 AMP SUBMINIATURE RELAY

Cornell Dubilier# CDR701AFEPL-703D 24 Vdc, 1600 ohm coil. SPST, N.O. contacts rated 10 Amps @ 125 Vac. Small sealed case with pc terminals. 0.74" x 0.6" x 0.6" high. UL CAT # RLY-355 \$1.00 ea. • 100 for \$65.00

120 VAC DPDT RELAY

Magnecraft # W78ARPCX-5. 120 Vac, 4400 ohm coil. DPDT, 10 Amp contacts. 1.354" x 0.81" x 1.07" clear polycarbonate dust cover. PC leads. UL, CSA CAT # RLY-403 \$ 2.25 each 100 for \$ 1.75 each



120 VAC D.P.D.T. 10 AMP

Kest # KRLY-2120. 120 Vac, 5000 ohm coil. D.P.D.T. 10 Amp contacts. KH "Ice cube" style, clear polycarbonate case. 1.1" x 0.83" x 1.37" high. Solder or 0.187" gc or solder terminals. CAT # RLY-2120 \$2.75 each



SOLID STATE RELAYS

ALL SOLID STATE RELAYS MUST BE TESTED UNDER LOAD

10 AMP

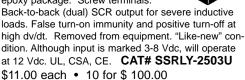
Potter & Brumfield # SSRT-240D10 Input: 3-32 Vdc Output: 10 Amps @ 120/240 VAC

UL, CSA. 2.25" x 1.75" x 0.88."

CAT # SSRLY-10 \$ 9.50 each

25 AMP (USED)

Crouzet/ Gordos # G280D25-49 Control Voltage: 3 - 8 Vdc Load: 25 Amps, 24-280 Vac 2.25" x 1.75" x 1" metal-backed epoxy package. Screw terminals.



25 AMP

Potter & Brumfield # SSRT-240D25 Input: 3-32 Vdc Output: 25 Amps @ 120/240 VAC UL, CSA. 2.25" x 1.75" x 0.88." CAT # SSRLY-25 \$ 17.50 each



LATCHING RELAYS

1.5 VDC Takamisawa# RA4L-D1.5W-K 1.5 vdc. 12.5 ohm dual coil latching relav. 4PDT configuration. Bifurcated contacts rated 1 amp (UL rating), 2 amps resistive. Sealed plastic case, 1.387" x 0.390" x 0.360" high. PC pins. UL and CSA. CAT# LRLY-154 \$2.00 each

5 VDC, D.P.D.T. HIGH SENSITIVITY

Aromat # TQ2E-L-5V. 5 vdc, 250 ohm single coil latching relay. 1 amp contacts. Ultra-small size. 0.551" X 0.354" X 0.197" high. DIP pin configuration. Sealed for immersion. UL, CSA. CAT# LRLY-56 \$1.75 each 100 for \$125.00



12 VDC, D.P.D.T. LATCHING

Communications Instruments, Inc. # MQP12L DPDT, 1 amp contacts. 12 vdc, 1400 ohm coil. 0.35" X 0.55" X 0.2" high.



CAT # LRLY-126 \$2.00 each

ELAY SOCKETS

KH RELAY SOCKETS

Fits all KH and KHU style, 14 pin relays except PC mount style (most relays starting with CAT# 4PRLY).

Solder lug terminals.

CAT# PRLY-S

75¢ each



PC pins for PC board mount. CAT# PRLY-SC 75¢ each

Screw terminals for easy connections and changes. Can be surface mounted or snap-mounted to aluminum DIN rail. UL and CSA listed.1.17" X 2.44" X 0.98"

CAT# MT14-PC \$5.50 each • 10 for \$50.00

KUP RELAY SOCKET

Socket to fit KU and KUP style relays. CAT# SRLY-11 \$1.00 each



8 PIN OCTAL SOCKET

Screw terminals for easy connections and changes. Can be surface mounted or used with aluminum DIN rail. UL listed.

CAT# OTO8-PC

\$2.50 each • 10 for \$22.50

RELAY HOLD DOWN SPRING

For use with KH style relays, including our CAT #s beginning with 4PRLY or 2PRLY. Holds relay securely in socket.

CAT # RSP-1 3 for \$1.00

AUTO RELAY SOCKETS

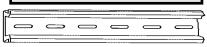


Pre-wired sockets for use in automotive alarms, door-locks, starter-interrupt, light circuits and other auto applications. Both have color-coded 12" long leads. Will fit our relay, CAT# RLY-351.

RELAY SOCKET 5 wire socket with two 18 AWG leads and three 14 AWG leads. CAT # SRLY-2 \$2.00 each • 10 for \$ 15.00

DUAL RELAY SOCKET Dual 5 wire sockets designed for door-lock applications. CAT # SRLY-4 \$ 3.00 each • 10 for \$ 25.00

ALUMINUM DIN RAIL



For use with screw terminal sockets . An easy way to attach multiple relay sockets. Sockets snap-on and off of rail. DIN rails come in 1 meter (39") lengths with pre-drilled mounting holes every inch. Can be cut to shorter lengths.

CAT# C102P \$4.50 each • 10 for \$42.50

SOLENOIDS

10.5 VDC SOLENOID

PES Ltd. # PES-TU1939



5/16" dia. plunger with turret tip and c-clip at end. 10.5 Vdc, 29 ohm coil. Intermittent duty cycle. 0.77" dia. x 1.93" long body. Non-threaded mounting bushing could be mounted in a 0.45" wide slot in panel or bracket no more than 0.1" thick. 2.75" leads terminated with 2 pin socket connector.

CAT# SOL-57 \$1.25 each • 10 for \$1.00 ea.

SMALL 12 VDC SOLENOID

Shindengen # F92303P. 0.75" dia. x 0.65" body. Plunger has a 0.63" dia. disc at one end and C clip at opposite end. Plunger travel is 0.07." 250 ohm coil. 12 Vdc continuous duty cycle.

4.5" pigtail leads. **CAT # SOL-70** \$1.50 each

12 VDC D-FRAME SOLENOID

Deltrol # D-70 Part # 50031-81 Powerful 12 Volt DC solenoid for intermittent duty cycle. 3 ohm coil. 48 Watts. 0.5" diameter slotted plunger. Body size: 2.625" x 1.828" x 1.562." 8-32 tapped mounting holes in two sides. Weight: 1 lb, 3 oz. 11" pigtail leads. CAT # SOL-72 \$ 4.50 each

12 VDC POWER SOLENOID

White-Rodgers # 70-111225-5A 80 Amp, continuous duty power solenoid. Type 70, single pole, normally open. Case-grounded type. 1.77" diameter X 2.5" long. Applications include remote control of power circuits on

vehicles and battery chargers. Dust-proof enclosure. Termination 5/16"-24 UNF-2A thread. Bracket for bulkhead mounting. UL.

CAT # SOL-71 \$ 7.50 each

12 VDC TUBULAR SOLENOID

Lucas (Ledex)# 174419-021 Powerful 12 Vdc solenoid for intermittent duty cycle. 1.4 ohm coil. 1.25" dia. x 2.25" long body with

mounting plate. 0.5" diameter plunger.

CAT # SOL-74 \$ 4.20 each

24 VDC D-FRAME SOLENOID

KGS # 15H17. 24 Vdc. 47 ohm coil. 2.49" x 1.18" x 1.49" open-frame solenoid with 0.59" diameter plunger.

Threaded mounting holes in one side of frame.

CAT # SOL-75 \$ 3.65 each



24 VDC TUBULAR SOLENOID

Lucas (Ledex) # 121E792 24 Vdc, 44 ohm coil. 1" diameter x 2" body. 0.75" diameter threaded mounting bushing. 0.435" diameter plunger. 21" leads.

CAT # SOL-76 \$ 4.15 each

24 VDC SOLENOID

Guardian# A420-066622-00 / 11-C-24Vdc 24 Vdc continuous duty solenoid. 124 ohm coil. 1.85" x 1.4" x 1.2" body. 0.31" diameter slotted plunger with pin. 0.25" qc/ solder connectors. CAT# SOL-73 \$ 2.50 each

24 VDC "CLAPPER" SOLENOID

Solen # 121E14620. 24 Vdc, 147 ohm coil. Top of "clapper" moves 0.4" when coil is energized. Solenoid box is 1" x 0.8" x 0.67" thick including mounting bracket. 8" pigtail leads. CAT # SOL-65 \$1.50 each



24 VDC SOLENOID WITH SPRING PLUNGER

Ledex 121K04970 1" long x 0.4" x 0.45" box solenoid mounted on a bracket. 24 Vdc. 390 ohm coil. Continuous duty. Spring-return plunger travels 0.24" when energized. Pigtail leads. \$ 1.75 each

24 VDC PULL-TYPE SOLENOID

CAT # SOL-68

Comm. Instruments Inc. Powerful pull-type solenoid with spring return. Intermittent duty, max 10%. 3.3-4.2 ohm coil. Designed for 22-26 Vdc use, but it works fairly well on 12 Vdc. Pull force, 3.7 lbs @ 24 Vdc. Body is 0.77" diameter X 1.82" long. 3" long plunger. 3.4" mounting bracket attached to body. CAT# SOL-58 \$1.50 each

PUSH-TYPE SOLENOID

Guardian # A420-067074-01 Small tubular, push-type solenoid. 44 ohm coil. Operates on 24 Vdc with intermittent duty cycle or on 12 Vdc, continuous duty cycle. Plunger travel is 0.165". Pushes out when energized. Brass plunger has a tip, 0.25" in diameter. Solenoid body is 0.63" diameter x 1.17" long. 0.32" diameter plain bushing extends 0.36" beyond body. 9.5" pigtail leads. CAT # SOL-52 \$2.00 each • 10 for \$17.50

MANUFACTURERS

We Purchase Excess Inventories. CALL, WRITE, E-MAIL or FAX your list.

BATTERIES

RECHARGEABLE NICKEL-CAD

SALE ON RECHARGEABLE **NICKEL-CADMIUM BATTERIES**

AAA CELL 1.2 Volt 220 mAh CAT # NCB-AAA \$1.25 each 10 for \$ 11.00 • 100 for \$ 90.00

AA CELL 1.2 Volt, 650 mAh CAT # NCB-AA \$1.25 each 10 for \$11.00 • 100 for \$90.00



C CELL 1.2 Volt 1800 mAh CAT # NCB-C \$1.45 each 10 for \$12.00 • 100 for \$100.00



D CELL 1.2 Volt 1800 mAh CAT # NCB-D \$1.55 each 10 for \$13.50 • 100 for \$115.00

NICKEL-CAD CELLS w/ Solder Tabs

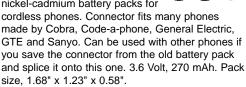
1.2 Volt cells with solder tabs. For building or re-building battery packs.

<u>Type</u> <u>Capacity</u>	<u>CAT #</u>	<u>Dimensi</u> 1-9	<u>ions</u> 10+
<u>AA</u> 600 mAH	NCB-SAA	<u>0.56" x 1</u> 2.50	2.25
<u>Sub-C</u> 1300 mAH	NCB-SC	<u>0.90" x 1</u> 4.00	3.50
2/3 Sub-C 600 mAH	NCB-23SC	<u>0.90" x 1</u> 4.20	4.00
4/5 Sub-C 1200 mAH	NCB-45SC	0.90" x 1 4.50	4.20

NICKEL-CADMIUM PACKS

2/3 AA CELL PACK FOR CORDLESS PHONES

Sanyo # 3N-270AA. Popular rechargeable nickel-cadmium battery packs for



CAT# NCB-23AA \$2.00 each 10 for \$1.75 each

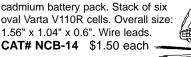
8.4 VOLT 250 mAH PACK

Seven Sanyo AAA nickel cadmium cells in a single row. Shrink-wrapped in a sleeve with internal thermal cutoff and wire leads. This pack comes apart easily if you want to separate and use the batteries individually or reconfigure into new packs. Overall size: 2.82" x 1.76" x 0.43."

CAT# NCB-84 \$ 3.00 each (43¢ per cell)

7.2V NI-CAD BATTERY PACK

7.2 Volt, 110 mAh rechargeable nickel cadmium battery pack. Stack of six oval Varta V110R cells. Overall size: 1.56" x 1.04" x 0.6". Wire leads.





RECHARGEABLE **NICKEL METAL HYDRIDE**

Nickel Metal Hydride batteries have double the capacity of standard nickel cadmium cells and can be charged faster without the "memory problems" associated with nickel cadmium batteries.

AAA CELL



1.2 Volt, 550 mAh. 0.4 " dia. X 1.74" long. CAT# NMH-AAA \$2.50 ea. • 10 for \$ 21.00

AA CELL - 1200 mAH CAT# NMH-AA



REDUCED PRICE!

\$3.00 each • 10 for \$25.00

AA CELL, 1600 mAH HIGH CAPACITY

0.56" diameter x 1.97" long. 1.2 Volt, 1600 mAH. CAT# NMH-160 \$3.50 each • 10 for \$30.00

AA "FLAT-TOP" CELLS

Panasonic# HHR-110AA0. 1.2 Volt, 1100 mAh "flattop" rechargeable AA cells for use in battery packs. 0.55" diameter X 1.95" long. Two styles:

REGULAR FLAT-TOP CAT# NMH-110



\$1.50 each • 40 pcs \$1.25 each 120 pcs \$1.00 each • 800 pcs 85¢ each

SOLDER-TABBED CAT# NMH-110T



\$1.75 each • 40 pcs \$1.50 each 120 pcs \$1.25 each • 800 pcs \$1.00 each

RECHARGEABLE BATTERY FOR 9 VOLT APPLICATIONS

Eveready # NH22. Nickel Metal Hydride rechargeable battery. Replaces 9 Volt batteries in many applications. Actual voltage 7.2 Volts. Can be charged in most Nickel-cadmium chargers. CAT# NMH-9 \$ 3.50 each

7.2 VOLT STRIP PACKS

Miniature, rechargeable nickel-metal hydride button cell packs made for NEC. Consist of seven cells in a row, in series. Shrinkwrapped. Double-stick tape on one side. Mini-two-pin female connector (1mm spacing). Two sizes available:

7.2 Volt, 40 mAh 1.75" leads 2.65" x 0.47" x 0.23" **CAT # NMH-11** \$1.50 each

7.2 Volt, 70 mAh 2.75" leads 3.65" x 0.64" x 0.27" **CAT # NMH-10** \$ 2.00 each

4.8 VOLT 180 MAH STRIP PACK

Four rechargeable 1.2 Volt nickel-metal hydride coin cells (in series. Shrink-wrapped. 10" leads w/ 2 pin connector. Pack size: 3.5" x 0.93."

CAT # NMH-12 \$ 2.00 each

NICKEL-METAL HYDRIDE 4.8 VOLT 850 MAH PACK

Phillips # 25733. New, rechargeable pack manufactured for cell phones. Contains four 1.2 Volt, 850 mAh cells. Each cell is 1.8" x 0.65" x 0.3". Relatively easy to remove cells and reconfigure them to suit your needs.

CAT# NMH-53 \$2.00 each • 10 for \$17.50

LITHIUM BATTERIES

Lithium batteries have a very long shelf life, typically ten years or more. Most of the cells in this section are designed for low current applications like memory backup. They are not normally used as a primary power source. They are not rechargeable.

3 VOLT, 39 mAh

Rayovac # BR1225-T2. 0.5" diameter. PC pins on 0.4" centers. CAT # LBAT-15 \$1.00 each • 10 for \$7.50 • 100 for \$60.00

3 VOLT, 39 mAh

Rayovac # BR1225-T3. Same as LBAT-15 above with three PC leads in a triangular pattern. CAT # LBAT-30

75¢ each • 10 for \$6.50 • 100 for \$45.00

3 VOLT, 255 mAh Special!

Panasonic # BR2330-1GU.



3 volt, 255 mAh coin cell with pc leads. 0.9" dia. x 0.12" thick. 0.7" spacing between positive and negative leads. 1996 date code.

CAT # LBAT-16 2 for \$1.00 100 for \$ 35.00 • 1000 for \$200.00

3 Volt 300 mAh



Rayovac BR2335L3L, coin cell with pc leads. 0.9" dia x 0.13" thick. 0.7" spacing between

positive and negative leads. 1998 date code. CAT# LBAT-34 2 for \$1.25 • 100 for \$40.00

3 VOLT, 75 mAh

Sony# CR2016. 0.787" dia. X 0.06" thick.

CAT# LBAT-21 75¢ each

10 for \$6.50 • 100 for \$45.00

3 VOLT, 180 mAh Toshiba# CR2032, 3 volt. 180 mAh. 0.787" diameter.

CAT # LBAT-20 \$ 1.00 each • 10 for \$ 8.50

3 VOLT 280 mAh

Sony CR2430. 3 volt 280 ma. 0.96" diameter x 0.11" thick.

CAT# LBAT-32 \$1.25 each



3 VOLT 560 mAh

Daitron # CR2450. 3 Volt, 560 mAh. 0.96" diameter x 0.19" thick.

CAT # LBAT-33 \$ 1.75 each

3 VOLTS 165 mAh

Panasonic #BR-2325-1VC. 0.9" dia. x 0.1" thick. PC pins on 0.4" centers for vertical mounting. Insulated circumference.

CAT # LBAT-26 75¢ each • 10 for \$ 6.50

3 VOLT, 950 mAh

Renata # CR2477N. 0.96" diameter x 0.31" thick. PC pins on 0.74" centers.

CAT # LBAT-22 \$1.25 each • 10 for \$10.00



3 VOLT LITHIUM BATTERY CR123A

Tekcell CR123A, 3 Volt lithium cell. Special quantity purchase of recent date code cells. Commonly used in photographic equipment.



1.34" long x 0.65" diameter. CAT# LBAT-123 \$2.85 each • 10 for \$2.60 each 100 for \$2.35 each • 800 for \$1.90 each

AA SIZE w/ SOLDER TABS

Electrochem Industries# QTC85 / 3B940 3.6 Volt lithium cell with flat solder tabs on both ends. Can be easily made into packs. Standard AA size: 0.55" dia. x 1.97" long. Raised nipple on positive end. 96 date code. CAT # LBAT-25 \$2.50 each • 10 for \$20.00

3 VOLT "LASER LITHIUM"

Sanyo # CR12600SE. 2.3" long x 0.45" diameter. 1997 date code.



CAT # LBAT-27 \$2.50 each • 10 for \$20.00

SEALED LEAD ACID BATTERIES

Maintenance-free, rechargeable sealed lead-acid batteries. Can be used in any position and can be trickle charged for long periods of time. Excellent for alarms, communications



and back-up applications. WILL NOT LEAK.

6 VOLT, 1.2 AH BATTERY 3.8" x 0.93" x 2" high. CAT# GC-612 \$5.25 each • 20 for \$ 4.75 each

6 VOLT 4 AH 2.75" x 1.9" x 4" high. CAT # GC-64 \$ 7.50 each

6 VOLT 10 AH 5.95" x 2" x 3.65" high. CAT # GC-610 \$ 15.00 each

SPECIAL, 12 VOLT 1.3 AH 3.82" X 1.88" X 1.95" high.

CAT # GC-1213 \$ 8.00 each

SPECIAL 12 VOLT 2 AH

7" x 1.35" x 2.37" high. Removed from new equipment. CAT # GC-122 \$9.50 each

12 VOLT 5 AH

Panasonic #LC-R125P1. 3.5" x 2.7" x 4" high. 0.25" quick-connect/ solder terminals. CAT# GC-125 \$15.00 ea. • 12 for \$ 12.50 ea.

12 Volt 7 AH 6" x 2.5" x 3.71" high. CAT# GC-1270 \$22.00 each

12 Volt 17 AH 7.12" x 3" x 6.7" high. CAT# GC-217 \$ 35.00 each

> **FAX YOUR ORDER 24 HOURS** A DAY 7 DAYS A WEEK. (818) 781-2653

YOUR ORDER WILL SHIP THE NEXT **BUSINESS DAY.**

3.6 VOLT 1200 MA RECHARGEABLE LITHIUM-ION CELL

Sony # 18650. Rechargeable lithium-ion cell with solder-tabs. Ideal for high energy battery packs. 0.72" dia. x 2.56" long.

CAT # BTE-1200

\$3.50 each • 50 for \$3.00 each

ALKALINE BATTERIES

DURACELL® PROCELL® INDUSTRIAL **ALKALINE BATTERIES**





AA CELL, 1.5 VOLT 2100 mAH CAT # PRC-1500 65¢ each

AAA CELL, 1.5 VOLT 1000 mAH CAT # PRC-2400 65¢ each

C CELL 1.5 VOLT 7000 mAH CAT # PRC-1400 \$ 1.25 each

D CELL 1.5 VOLT 14000 mAH CAT# PRC-1300 \$1.35 each

9 VOLT BATTERY 565 mAH CAT # PRC-1604 \$ 2.25 each

AAA ALKALINE CELLS Fresh two-pack of AAA "heavy-duty" alkaline cells. Made for Polaroid. CAT # BT-25 50¢ per pack (2 cells) 100 packs (200 cells) 40¢ per pack

12 VOLT ALKALINE BATTERY

0.41" diameter x 1.13" long cylindrical cell used in keychain alarm remotes and photo applications.



CAT # BAT-12 \$1.25 each • 10 for \$ 10.00

SILVER OXIDE BUTTON CELI

386S (silver oxide) button cell. 0.45" dia. x 0.15" thick. For watches, calculators, cameras, games etc. CAT # BAT-8 75¢ each 10 for \$5.00 • 100 for \$45.00

ALKALINE BUTTON CELL



For laser pointers, games, clocks, cameras etc. 0.45" diameter X 0.21" thick button cell. Replaces all batteries designated AG-13, A-76, LR-44, V13GA and RW-82. CAT# BAT-7 75¢ each 10 for \$5.00 • 100 for \$45.00

COIN CELL HOLDER

PC MOUNT HOLDER FOR BUTTON CELL

Fits CR-2430, 2450 and similar 0.96" diameter coin cells. CAT # BH-17 50¢ each



SURFACE MOUNT HOLDER FOR BUTTON CELL

For CR1220 and other 12 mm coin cells. Surface mount solder tabs. Overall dimensions, 0.71" diameter x 0.18" high.



CAT # BH-15 4 for \$ 1.00

100 for \$ 20.00 • 1000 for \$100.00

BATTERY CHARGERS

NCD/NMH BATTERY CHARGER

with 4 AA CELLS

Tysonic # TY-3969. Charges AA, AAA and 9 Volt nickel metal hydride (NIMH) and nickel cadmium (NICD) batteries. Built-in charging control charges at optimum rate for safe charging and maximum battery life. Charges NiCd in 4 hours, NiMh in 7 hours. Reverse polarity protection. LED indicators show charging status. Includes 4 NIMH AA 1600 mAh batteries. Don't

miss this opportunity to get batteries and a charger at a special low price. Our regular price for batteries, alone, is \$14.00.

CAT# BC-39 \$19.95 each

NCD/NMH BATTERY CHARGER

Similar to charger above, but doesn't include the batteries. **CAT # BC-5** \$12.50 each

GE CHARGER FOR NICKEL-CAD

BATTERIES

General Electric charger for up to four AA, AAA, C or D, or one 9 Volt nickel-cadmium cell. Can be left on continuous charge without causing harm. 8.125" x 3.8" x 2.5" case. Can be wall mounted. LED charging indicators. UL. CSA. CAT # BC-4 \$9.95 each

4.8 VOLT

Matsushita Electric# RE6040.
Great for charging four
nickel-cadmium or nickelmetal hydride batteries.
Originally designed for charging
power tool battery packs.
Rated 4.8 Volts, 350 mA.

Six foot cord with 2.5 mm co-ax plug. CSA. CAT # DCTX-4848 \$2.00 each

BATTERY HOLDERS

1/2 AA CELL HOLDER

Keystone # 1103. Spring steel, nickel-plated holder for 1/2 AA cell. 1.23" x 0.62" x 0.65" high. Solder lugs.

CAT # BH-13 2 for \$1.00 • 100 for \$30.00

2 C CELL HOLDER

Aluminum holder for two in-line C cells. 4" long x 1" x 0.96". Solder lugs.

CAT # BH-18 75¢ each



2AA CELL BATTERY HOLDER w/ SNAP

Black nylon holder for two AA cells. Terminates with snaps that fit standard 9V battery snaps.
Simplifies removal and replacement of batteries. Fits our snaps, CAT # BST-3. 2.27" x 1.23" x 0.6."

CAT # BH-2S 2 for \$1.00

100 for 35¢ each • 1000 for 25¢ each

9V BATTERY HOLDER, PC MOUNT

MPD Inc., # BH-9VPC. Black plastic holder with snaps for standard 9 Volt battery. 2.15" x 1.18" x 0.82" high. PC pins on 0.5" centers. CAT # BH-9VPC 50¢ each



9 VOLT BATTERY SNAP

Snaps onto standard 9 volt battery.
3" wire leads. CAT# BST-3
4 for \$1.00 • 100 for \$15.00



VIDEO CAMERAS, CABLES, CONNECTORS & ACCESSORIES

MINIATURE INFRARED CAMERA

Miniature PC board camera sees in total darkness as well as daylight and low light. Six on-board Infrared LEDs provide invisible "light" seen only by the camera. 3.6 mm fixed lens. Auto-iris. Operates on 8-12 Vdc. 1.74" x 1.55" x 0.97" thick. 18" leads with RCA jack for video output and 2.1 mm co-ax jack power output. Includes wall-mount power supply. CAT# VC-3000 \$97.00 each

PINHOLE BOARD CAMERAS



BLACK & WHITE

1/3" CCD. 1.2" square x 0.65." 420 TV lines. 0.1 Lux. F2.0, 3.7mm flat pinhole lens. Includes cable with RCA connector video output, and 2.5mm coax connector (C+) for power. Requires 8-15 Vdc power supply. CAT # VC-360 \$ 49.00 each

COLOF

1/3" DSP color CCD. 1.25" square pc board camera. 0.2 Lux. F2.0, 380 TV lines. Requires 8-15 Vdc power supply.

CAT # VC-320 \$ 125.00 each

COLOR VIDEO CAMERA with AUDIO



CC2000 camera was designed for video conferencing. Its unusual housing was designed to sit on top of a monitor facing the operator. The lens swivels about 30 degrees in any direction and has settings for normal or wide angle viewing. The camera also has a threaded fitting for mounting on a tripod or camera bracket. Beige housing with a built-in lens cover that can slide closed when not in use. Overall dimensions 7" x 3.6" x 3.25." 6' cord with adaptor has RCA plug outputs for video and audio and a coax jack for DC power. Includes 9Vdc 1.5 Amp power supply. Works with any NTSC monitor or video recorder.

CAT# VC-127 \$49.00 each

INFRARED SENSOR B&W CAMERA

This is a great buy on an inexpensive black and white miniature infrared camera, that is ready to go. 1/3" (8mm) B/W CCD. 320 lines of resolution. 0.1 Lux. Comes complete



with a miniature metal enclosure, that measures approximately 2 1/2" X 1 3/4" X 1 1/4" deep including the lens. Includes a mounting bracket. Six infrared LED's mounted in the enclosure, three on each side of the lens, allow the camera to see in low light as well as total darkness. Camera and LED's operate on 12 Vdc between 100ma and 300 ma. 9" leads with RCA jack for video output and 2.1 mm jack for power. Power supply not included. We recommend our CAT# DCTX-122 (\$3.00 each) as a power source.

CAT # VC-303 \$37.50 each

PINHOLE CAMERA IN MINIATURE ENCLOSURE

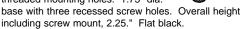
BLACK & WHITE

1/3" B/W CCD. Miniature metal enclosure is 1.18" square x 0.72." 420 TV lines. 0.05 Lux. F2.0 lens. Operates on 9-12 Vdc. Includes cable with connectors, mounting bracket & power supply.

CAT # VC-40 \$ 69.00 each

ADJUSTABLE CAMERA MOUNT

Compact metal camera-mount bracket. Ball joint allows vertical or horizontal orientation. Fits all standard camera threaded mounting holes. 1.75" dia.



CAT # CMB-1 \$ 4.25 each

VIDEO CAMERA EXTENSION CABLES



Allows placement of video camera up to 50 feet from its power source and video monitor/recorder. Power cable has 2.1mm coax male on one end, female on the other end. Audio and video cables have RCA plugs on both ends. Suitable for all of the cameras on page 40-41.

VIDEO AND POWER CABLE - dual cable CAT # CB-29 \$ 10.50 each

AUDIO, VIDEO AND POWER CABLE - triple cable CAT # CB-27 \$ 18.95 each

5.5" BLACK AND WHITE MONITOR

Black & white 5.5" monitor, ideal for surveillance.

rear-view camera in format. Plug-and-play for



hold adjustments. Sloped black case, 8.5" x 5.5" x 5.5" high. Operates on 120 Vac or use with 12 Vdc 800 mA wall adapter (2.1mm, center positive), or auto cigarette lighter cord. Wall adapter or cigarette lighter cord not included. CAT# MTR-5 \$40.00 each

GREAT PRICE!

VIDEO / RF MODULATOR Converts audio and video line level signals to RF which can be inputted to any television

on channel 3 or 4. Allows you to use your television as a video monitor for use with

a video camera, computer or other video device. Output via 1 foot cord with male F connector. Also has an antenna-in female F connector, so that TV can remain connected while modulator is in use. Channel 3-4 selector switch. Video, audio and power inputs are through a 7 foot cable terminated with a mini-DIN plug which generally needs to be cut off so connections can be made directly to conductors in cable. We supply a hook-up diagram. Requires a 4.5 - 6 Vdc, 50 mA power supply or wall adapter (not included). Large quantity available. CAT# MOD-6

\$5.00 each • 10 for \$4.50 each

ZENITH VIDEO/RF MODULATOR

Zenith # ZEV210. Use your television as a video monitor for use with video camera or other video device. Converts audio and video line level signals to RF which can be inputted to any television on channel 3 or 4.

Features an on-off switch allowing you to switch between video input and antenna input. RCA jacks for audio and video inputs. F connectors for RF output and antenna input. Originally designed for use with a Zenith video camera system. Has an output jack to power that device. Input power: 15 Vdc @ 150 mA. Requires a DC wall transformer for power (our CAT# DCTX-1252 works fine). Includes a 3' F to F cable and a 6" cable with DC plugs each end.

CAT# MOD-210 \$15.00 each

VIDEO CASSETTES

"HI 8" VIDEO CASSETTE (Used)

SONY T-120 "HI-8" (120 minute) video cassettes. Top-of-the-line, metal particle cassettes, used for a short time, then bulk erased.



Includes plastic storage box. CAT# VCU-8 \$3.00 ea. • 10 for \$28.00 • 100 for \$250.00

S-VHS VIDEO TAPES

Save a bundle on namebrand S-VHS, T-120 tapes. These tapes were used for a brief period, then bulk erased. The record-protect tabs have been broken out, so you will have to cover the notch with a piece of tape, but they work great.

CAT# S-VHS \$3.00 each 10 for \$28.00 • 100 for \$250.00

DIGITAL VIDEO TAPE

Panasonic DVM60. Miniature digital video cassette. 60 Minutes.

CAT # DVM-60

\$7.50 each • 3 for \$21.00



(USED)

VIDEO ACCESSORIES

VIDEO BLACK BOX with VARACTOR TUNER

"Black Box," video converter/ processor. Inside is a pc board with a varactor tuner, circuit

board with assorted components.

Back panel has four video F connectors and a power jack. Led in front panel. Overall dimensions: 8" x 7.5" x 1.5" CAT # EX-60 \$2.50 ea.

VIDEO A/B SWITCH

Jebsee # SW-78S. Compact, shielded two position co-ax slide switch. Standard F connectors for 75 ohm input and outputs. Good quality assembly with solid switching action.



CAT# ABS-4 \$3.50 each

LOW PROFILE OUTDOOR TV ANTENNA RCA ANT4100X

Breakthrough in digital technology for receiving local UHF and VHV channels. Low profile, omnidirectional antenna.

Replaces unsightly rooftop antenna. Can be hidden in the attic, under the eaves or mounted on the roof. Weatherproof. Ideal for marine use. 14.75" x 14.75" x 2.25." Paintable ABS plastic cabinet. 75 ohm input. Effective for up to 30 mile radius in flat area.

CAT # ANT-100 \$18.95 each

VIDEO/AUDIO DUBBING CABLES

Used to connect two VCR's together, or as a line to line connection between two Video devices. RCA style plugs each end.



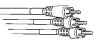
CAT# VMC-6

\$1.00 each • 10 for 80¢ ea. • 100 for 60¢ ea.



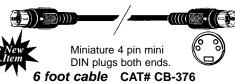
STEREO VIDEO CABLES

75 ohm video 6' cable with two audio cables for stereo dubbing. Gold tipped RCA plugs. Suitable for DSS.



CAT # AVS-61 \$ 3.75 each

S-VHS PATCH CABLES



\$2.50 ea. • 10 for \$2.30 ea. • 100 for \$1.90 ea.

12 foot cable CAT# CB-365

\$3.50 each • 10 for \$32.50

OPTICAL CABLE WITH TOSLINK CONNECTORS

High quality fiber optic cable with toslink-to-toslink connectors. Provides a precision audio link between DVD, CD players Mini Disc Recorders and A/V Receivers.

Heavy-duty metal shell protects optical connector. A fraction of regular price.

CAT# OCB-3 3 Foot Cable \$8.50 each \$12.50 each 6 Foot Cable CAT# OCB-6

VIDEO HOOK-UP CABLE

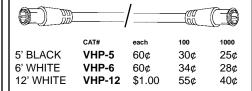


SCREW-ON CONNECTORS

Video cables with screw-on F style connectors both ends.

FEET	CAT#	each	10	100
3'	VHU-3	1.00	0.85	0.70
6'	VHU-6	1.25	1.00	0.85
12'	VHU-12	2.00	1.50	1.10
25'	VHU-25	3.00	2.50	2.00

VIDEO PATCH CABLES with **PUSH-ON "F" CONNECTORS**



F CONNECTORS AND ADAPTERS

F-59 connector w/ separate crimp ring for

price

100

RG-59 cable F-59

CAT#

5 for \$1.00 \$15.00

F-59 with attached crimp ring for RG-59 cable F-59R 4 for \$1.00 \$20.00



Twist-on F-59 for RG-59 cable

FTO-59R 4 for \$1.00 \$20.00



F-56 connector with heavy-duty attached ring.

For RG-6U cable. F-56R

4 for \$1.00 \$20.00



Twist-on F-56 for RG-6 cable FTO-56R

4 for \$1.00 \$15.00



Push-on F-59. Makes threaded

F connector into a quick connect POF-SW 2 for \$1.00 \$40.00



75 ohm terminator

FTER 3 for \$1.00

\$25.00



F-61. Chassis mount female F-61 3 for \$1.00

\$25.00



Splicer, female. Connects two male connectors 4 for \$1.00 \$20.00



Splicer, male. Connects two female connectors

2 for \$1.50



\$55.00

75 OHM CABLE SPLITTERS



2 WAY SPLITTER 5-900 MHZ

CAT# TWS-2 \$1.00 each



3 WAY SPLITTER 5-900 MHZ

CAT# TWS-3 \$1.50 each



4 WAY SPLITTER 5-900 MHZ

CAT# FWS-4 \$2.00 each

BALUNS



PUSH ON MATCHING TRANSFORMER Quick connect style 75 to 300 ohm. CAT# POBL 4 for \$1.00 100 for \$20.00



INDOOR MATCHING TRANSFORMER

75/300 ohm mini matching transformer. CAT# IMT-1 50¢ each • 100 for \$35.00

REMOTES FOR CDs and VCRs



JVC # RM-RK20 TEAC # RC-505 PIONEER #CU-PD063 PIONEER # CU-PD105 AMC # RC-CD9

VCR CD Changer CD Changer CD Changer CD Player

CAT # IR-7 2 00 **CAT # IR-5** 2.00 CAT # IR-8 2.00 CAT # IR-9 2.00 CAT # IR-10 2.00

TUBING

20 GAUGE TEFLON TUBING

20 Natural Thin-wall TFE. 200 deg. C. 300 Volt VW1 SW. UL, CSA. CAT # TFE-20 25¢ per foot 4 foot minimum

500 foot roll \$ 75.00 (15¢ per ft)

IRRADIATED PVC TUBING

Alpha F105 black irradiated PVC tubing. VW-1 105 deg. C.

3/32" Diameter CAT# PVC-332 10¢ per ft. 10 foot minimum 100 feet \$8.00

3/16" Diameter CAT # PVC-316 15¢ per ft. 10 foot minimum 100 feet \$ 11.00

FEED THROUGH BUSHINGS

Seal wall openings and protect cables.

Fits one RG-6 cable. 0.30" I.D. **CAT# FTH-1** 5 for \$1.00

Fits one RG-59 cable. 0.26" I.D. CAT# FTH-3 10 for \$1.00 • 100 for \$8.00

18 GAUGE STRANDED. **UNINSULATED WIRE**

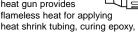
Woods #-893, 500' roll of 18 gauge stranded, uninsulated copper wire for grounding applications. CAT# WR-18SU \$12.00 per roll

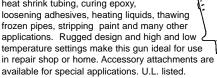


HEAT SHRINKABLE TUBING & ACCESSORIE

UNGAR HEAT GUN

Dual temperature heat gun provides





CAT# UHG-1095 \$52.50 each

ATTACHMENTS

Reducer for concentration of heat. CAT# UHG-1080 \$6.00 each

Reflector for heat shrink tubing.

CAT# UHG-1082 \$6.00 each





HEAT SHRINKABLE TUBING

Polyolefin heat shrinkable tubing shrinks to 50% of its original diameter when heated. It forms a tight mechanical bond even over irregularly shaped materials.

Available in 4 foot sticks or 100 foot rolls.

Size listed is expanded (pre-shrunk) diameter.

4 FOOT PIECE			
Dia.	Color	CAT#	Per 4'
3/64"	BLACK	HUG-364B	\$1.15
	RED	HUG-364R	\$1.15
	WHITE	HUG-364W	\$1.15
1/16"	BLACK	HUG-116B	\$1.20
	RED	HUG-116R	\$1.20
	WHITE	HUG-116W	\$1.20
3/32"	BLACK	HUG-332B	\$1.25
	RED	HUG-332R	\$1.25
	WHITE	HUG-332W	\$1.25
1/8"	BLACK	HUG-18B	\$1.35
	RED	HUG-18R	\$1.35
	WHITE	HUG-18W	\$1.35
3/16"	BLACK	HUG-316B	\$1.60
	RED	HUG-316R	\$1.60
	WHITE	HUG-316W	\$1.60
1/4"	BLACK	HUG-14B	\$1.90
	RED	HUG-14R	\$1.90
	WHITE	HUG-14W	\$1.90
3/8"	BLACK	HUG-38B	\$2.15
	RED	HUG-38R	\$2.15
	WHITE	HUG-38W	\$2.15
1/2"	BLACK	HUG-12B	\$2.40
	RED	HUG-12R	\$2.40
	WHITE	HUG-12W	\$2.40
3/4"	BLACK	HUG-34B	\$3.15
1"	BLACK	HUG-1B	\$4.50
1 1/2"	BLACK	HUG-112B	\$5.00
2"	BLACK	HUG-2B	\$4.00

100 FOOT ROLL

dia	color	CAT#	100' roll
1/16"	Black	HSS-116B	\$21.00
3/32"	Black	HSS-332B	\$23.00
1/8"	Black	HSS-18B	\$25.00
3/16"	Black	HSS-316B	\$28.00
1/4"	Black	HSS-14B	\$33.00
3/8"	Black	HSS-38B	\$38.00
1/2"	Black	HSS-12B	\$45.00

WIRE - CABLE - CO-AX

SHIELDED MULTI-CONDUCTOR JACKETED CABLES 100% FOIL SHIELD WITH DRAIN

For data communication, computer hook ups, audio and instrumentation. Stranded color coded conductors. Gray vinyl jacket.

CAT# 2C/S22	COND.	GAUGE	0.D	10'	50'	100'	500'	1000'
20/322	2	22	.170"	1.70	8.00	15.00	65.00	120.00
3C/S22	3	22	.180"	2.00	9.00	16.00	70.00	130.00
5C/S22	5	22	.200"	2.25	10.50	18.00	85.00	160.00
9C/S28	9	28	.22"	1.50	6.00	10.00	42.50	70.00
10C/S22	10	22	.264"	4.00	18.50	34.00	160.00	315.00

MICROPHONE CABLE

2 CONDUCTOR SHIELDED

22 ga. stranded conductor. Braided copper shield. Flexible black PVC outer jacket. 0.23" nominal O.D.

CAT# MC-2 10 feet \$4.50 100 feet \$32.00 • 300 feet \$90.00

TELEPHONE/STATION WIRE

ROUND STATION WIRE

AWG 24, solid wire.

COND.	CAT #	<u>50'</u>	<u>100'</u>	<u>500'</u>	<u>1000'</u>
4	4C/24	\$4.00	\$6.00	\$25.00	\$45.00
6	6C/24	\$5.00	\$9.00	\$40.00	\$70.00

FLAT TELEPHONE WIRE

AWG 28, stranded wire. For use with crimp-on RJ11, RJ12 and RJ45 modular connectors. Color-coded.

COND.	CAT #	<u>50'</u>	<u>100'</u>	<u>1000'</u>
4	4C/F	\$4.00	\$7.50	\$45.00
6	6C/F	\$6.00	\$8.50	\$65.00
8	8C/F	\$8.00	\$11.00	\$95.00

SPECIAL - 4 CONDUCTOR FLAT PHONE CABLE - BLACK

AWG 24 stranded wire. For use with crimp-on RJ11 modular connectors. Sold on 2,000 foot rolls only.

CAT# 4C/FB 2,000 foot roll \$70.00 per roll

CATEGORY 5E CABLE

4 unshielded twisted pairs (UTP). AWG 24



solid conductors. 350 mHz. Western Electric Standard color coding. UL, CSA listed.

CAT # CT-5E 50' for \$7.00 100' - \$12.00 1000' Speedout box \$74.00

STRANDED HOOK-UP WIRE

Available in black (**BK**), red (**RD**), white (**WH**), green (**GR**), blue (**BL**), and yellow (**YL**). Not necessarily solid colors.

May have colored stripe. You may want to specify a second color choice in case all colors aren't in stock.



Catalog number specifies gauge, length and color. For example CAT# 22-100BK = 22 gauge, 100', black.

Gaug	e CAT#	<u>100'</u>	CAT#	<u>1000'</u>
26	26-100	\$ 3.00	26-1000	\$ 20.00
24	24-100	\$ 3.25	24-1000	\$ 21.75
22	22-100	\$ 3.75	22-1000	\$ 25.00
20	20-100	\$ 4.00	20-1000	\$ 26.75
18	18-100	\$ 4.25	18-1000	\$ 28.00
16	16-100	\$ 5.50	16-1000	\$ 40.00
14	14-100	\$ 7.50	14-1000	\$ 55.00

CO-AXIAL CABLE

RG-6U DOUBLE SHIELD

BLACK. 18 ga solid center. 100% foil shield and 60% aluminum braid. 75 ohm impedance.

CAT# RG-6U 50 ft. \$9.00

100 ft. \$16.00 • 500 ft. \$70.00 1000 ft. \$130.00

RG-58/U COPPER SHIELD

BLACK. 20 ga. solid center, 80% copper braid shield, 50 ohm impedance.

CAT# RG-58U 50 ft. \$7.00 • 100 ft. \$12.00 500 ft. \$55.00 • 1000 ft. \$100.00

RG-59/U COPPER SHIELD

BLACK. 22 ga. solid center, 80% copper braid shield, foam insulator. 75 ohm imp.

CAT# RG-59C 50 ft. \$7.00 • 100 ft. \$12.00 500 ft. \$55.00 • 1000 ft. \$100.00

RG-174 MINI CO-AX

BLACK. 50 ohm impedance. 26 ga. stranded center. Braided copper shield. **CAT# RG-174** 10 ft. \$2.00 • 50 ft. \$8.00 • 100 ft. \$15.00 500 ft. \$70.00 • 1000 ft. \$110.00

COAX CABLE STRIPPER

Rotary coax cable stripper for RG58, RG59, RG62,RG6.

CAT # WS-60 \$ 12.50 each



EXTRA-FLEXIBLE GROUND AND POWER CABLE



AWG 4 cable. High-quality, finely-stranded, extra-flexible cable for ground, power or audio applications. 1050 (7 x 150) tinned copper strands.

Black PVC insulation. 0.27" nominal O.D.

CAT # AWG-4B \$ 1.25 per foot
10' for \$10.00 100' for \$ 75.00

8 GAUGE POWER CABLE

133 strand cable. Minimum order, 5 feet. BLACK **CAT # WR-8B** 5 feet \$2.25 50 feet - 40¢ per foot 100 feet 35¢ per foot

GROUND STRAP

3.75" GROUND STRAP

Braided copper ground strap. 0.5" wide X 0.03" thick

Braided copper ground strap. 0.5" wide X 0.03" thick. 0.22" dia holes at each end on 3.5" centers.

CAT# GS-11 4 for \$1.00

RED/BLACK POWER CABLE

Automotive grade "GPT" zip cord with red and black conductors. 80 degree C, flameretardant PVC insulation. 10 foot minimum order.

	CAT#	10 ft.	500 ft.
18 ga.	WRB-18	15¢ per ft.	10¢ per ft.
16 ga.	WRB-16	19¢ per ft.	15¢ per ft.
14 ga.	WRB-14	25¢ per ft.	22¢ per ft.
12 ga.	WRB-12	32¢ per ft.	29¢ per ft.
10 ga.	WRB-10	45¢ per ft.	41¢ per ft.
8 ga.	WRB-8	87¢ per ft.	77¢ per ft.

SPEAKER WIRE / ZIP CORD

Two stranded, parallel conductors. Can be separated or "zipped" at ends



for hook-up. Marked for polarity. Used for home, auto speaker installation or any low voltage application.

2 CONDUCTOR 24 GAUGE CLEAR

50 feet	\$2.50	CAT# 2/24C-50
100 feet	\$4.00	CAT# 2/24C-100
500 feet	\$15.00	CAT# 2/24C-500
1000 feet	\$28.00	CAT# 2/24C-1000

2 CONDUCTOR 18 GAUGE CLEAR

50 feet	\$4.50	CAT# 2/18C-50
100 feet	\$8.00	CAT# 2/18C-100
1000 feet	\$45.00	CAT# 2/18C-1000

2 CONDUCTOR 16 GAUGE CLEAR

50 feet	\$9.00	CAT# 2/16C-50
100 feet	\$17.00	CAT# 2/16C-100
500 feet	\$62.00	CAT# 2/16C-500
1000 feet	\$100.00	CAT# 2/16C-1000

2 CONDUCTOR 14 GAUGE CLEAR

50 feet	\$11.00	CAT# 2/14C-50
500 feet	\$91.00	CAT# 2/14C-500
1000 feet	\$150.00	CAT# 2/14C-1000

2 CONDUCTOR 12 GAUGE CLEAR

50 feet	\$18.50	CAT# 2/12C-50
100 feet	\$35.00	CAT# 2/12C-100
500 feet	\$130.00	CAT# 2/12C-500

SPEAKER WIRE SPECIAL

1000' 18 awg clear speaker wire.



CAT # 2/18C-1000

\$ 45.00 for 1000' roll

TINNED COPPER TUBULAR BRAID

Multi-stranded woven copper for high current grounding and shielding applications.



0.185" DIAMETER when rounded. 0.30" x 0.05" when flattened. Approximate current carrying capacity, 30-40 Amps. CAT # GS-12 3 feet for \$ 1.00 • 100 feet for \$ 25.00

Belden #8668

Tinned copper-braid cable for shielding and grounding applications. 30 Amps, recommended current capacity. Nom. O.D, 0.156" Nom. flattened width: 0.22" Nominal I.D: 0.17." 120 x #34 stranding. **CAT # GS-16** \$1.00 for 3' (3' minimum) 100' for 25¢ per foot • 1000' for 15¢ per foot

RIBBON CABLE



28 AWG stranded. Gray cable with a red marker stripe. .050 (1.27) center spacing. Designed to mate with all standard industry flat cable connectors.

COND.	CAT#	10 FEET	100 FEET
10	RCBL-10	\$2.00	\$12.00
16	RCBL-16	\$3.50	\$20.00
20	RCBL-20	\$4.00	\$23.00
26	RCBL-26	\$5.50	\$40.00
34	RCBL-34	\$6.50	\$50.00
36	RCBL-36	\$6.50	\$50.00
40	RCBL-40	\$8.00	\$60.00

COIL CORDS

TWO CONDUCTOR COIL CORD

Black 18 AWG, SPT-1, two conductor coil cord. 28" retracted. 6 feet extended. CAT# CC-2 65¢ each • 10 for \$5.50 • 100 for \$45.00

EIGHT CONDUCTOR COIL CORD

28" black coil cord extends approximately 6 feet. One end is cut-off near the coil. The other end has a 12" uncoiled run that terminates to a molded 9 pin male D-sub connector. 0.23" diameter. Eight, AWG 22 stranded, color-coded wires. No shield. CAT # CC-81 \$ 1.75 each

INSULATED STAPLES

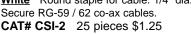
Heavy duty plastic staples. Unbreakable, no rusting. Will not shatter in cold temperatures.

White Oval staple for 0.125" X 0.200" Ideal for securing telephone, speaker, and other flat cables.



CAT# CSI-1 25 pieces \$1.25 100 for \$3.50 • 1000 for \$24.00

White Round staple for cable. 1/4" dia. Secure RG-59 / 62 co-ax cables.





Black Round staple for 0.30" dia. cable. Fits RG-6/U co-ax cable.

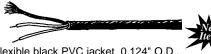
100 for \$3.50 • 1000 for \$24.00



CAT# CSI-3 25 pieces \$1.25 100 for \$3.50 • 1000 for \$24.00

Special! White Staple for 0.30" dia. cable Round staple for RG-6/U co-ax cable or other round cables up to 0.30" dia. CAT# CSI-3W 25 for \$1.00 100 for \$2.50 • 1000 for \$15.00

2 CONDUCTOR SHIELDED CABLE



Flexible black PVC jacket, 0.124" O.D.. Two AWG 24 stranded conductors, red and white insulation. Stranded copper shield. CAT# 2C/S24 10 feet for \$ 1.20 • 100 feet \$ 10.00 200 meter roll (approx. 650 feet) \$ 40.00

PHONE ACCESSORIES

SURFACE MOUNT **MODULAR WALL JACK**

For new construction or retrofitting.

4 Conductor, RJ-11 jack Includes mounting screws and double-sided tape.

CAT # MT-103 65¢ each

12 for 50¢ each • 96 pcs for 40¢ each

6 Conductor, RJ-11 jack CAT# MT-203 \$ 1.00 each 12 for 85¢ each • 100 for 65¢ each

FLUSH MOUNT MODULAR

WALL PLATE Flush wall mount fits standard outlet box. 4 PIN MODULAR JACK

CAT# MT-107 \$1.10 each 10 for \$9.00 • 100 for \$70.00



DUAL FLUSH MOUNT MODULAR WALL PLATE

Two modular jacks on a flush mount plate which fits a standard outlet box.

WHITE 4 PIN MODULAR JACKS CAT# MT-109W \$1.25 each 10 for \$1.00 ea. • 100 for 75¢ ea.



Δ,

IVORY 4 PIN MODULAR JACKS CAT# MT-109 \$1.25 each

10 for \$1.00 each • 100 for 75¢ each

FLUSH MOUNT ROUND MODULAR WALL PLATE

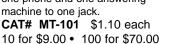
Modular jack on easy to install round plate.

CAT# MT-RWP \$1.30 each 10 for \$11.00 • 100 for \$90.00



T-ADAPTER FOR MODULAR JACK

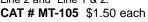
For connection of two phones or one phone and one answering machine to one jack.





2 LINE SPLITTER

Splits 2-line jacks into Line 1, Line 2 and Line 1 & 2.



TELEPHONE EXTENSION CORD

Male modular plug on one end, female on the other. 4 conductor - 25 feet.

CAT# MT-EX \$2.40 each 10 for \$20.00 100 for \$160.00



MODULAR CORD COUPLER

Couples two items with modular plugs together. CAT# MT-104 75¢ each • 10 for \$6.50 100 for \$25.00 • 1000 for \$150.00



EURO PHONE ADAPTERS

PHONE ADAPTER: FRANCE - USA

Allows you to connect a RJ-11 modular cord to a French phone outlet.

CAT # PA-1 \$1.50 each

PHONE ADAPTER: UK - USA

Allows you to connect a RJ-11 modular cord to a United Kingdom phone outlet.

CAT # PA-3 \$1.50 each

PHONE ADAPTER: GERMANY - USA

Allows you to connect a RJ-11 modular cord to a German phone outlet. CAT # PA-2 \$1.50 each

(D I 44)



MODULAR LINE CORDS AND PLUGS

Cross wired for telephone-voice applications

4 WIRE - MOD PLUGS BOTH ENDS A COLOR

(KJ-11)	War de			//A	1
DESCRIPTION	CAT#	1-9	10+	100+	
7 Feet	MT-260	.50	.45	.40	
15 Feet	MT-264	1.00	.85	.75	
25 Feet	MT-261	1.50	1.25	1.00	

SPECIAL! 30 foot, 4 conductor modular phone cord. Straight wired for modem and data use.

Also can be used for phones. CAT# MT-268 \$1.25 ea. • 10 for \$1.00 ea. 100 for 75¢ each • 1000 for 60¢ each

4 PIN MODULAR PLUG TO SPADE LUGS

7 feet **CAT# MT-250** \$1.00 each • 10 for \$9.00 100 for \$60.00



CRIMP STYLE MODULAR PLUGS

Crimp on modular plugs. Make or repair your own phone cords. Fits standard flat phone wire listed on page 44. Use crimp tool below to connect.



SPECIAL - 2 PIN (Center Pins) CRIMP-ON MODULAR PLUGS

CAT# CMP-2 10 for \$1.50 50 for \$7.00 100 for \$12.00 1000 for \$80.00

4 PIN CRIMP-ON MODULAR PLUGS

Not for handsets. CAT# CMP-4 10 for \$2.50 • 50 for \$10.00 • 100 for \$18.00

6 PIN CRIMP-ON MODULAR PLUGS

CAT# CMP-6 10 for \$3.00 50 for \$12.50 • 100 for \$20.00

8 PIN CRIMP-ON MODULAR PLUGS

CAT# CMP-8 10 for \$3.50 50 for \$15.00 • 100 for \$22.50

ECONOMY PUNCH-DOWN TOOL



An inexpensive tool for seating AWG 24 solid phone wire into punch-down terminal blocks. CAT # HT-318 \$ 2.00 each



MODULAR PLUG CRIMP TOOL

Strips flat phone wire and crimps modular plugs.

For 4 or 6 pin modular plug. CAT# MPCPT-6 \$14.00 each

For 8 pin modular plug. CAT# MPCPT-8 \$15.00 each

RJ-11 MODULAR PHONE JACKS

0.48" X 0.48" X 0.83" high including locator tab on top. 2 plastic support pins on 0.63" centers.

4 CONDUCTOR CAT# MT-4J 50¢ each • 10 for \$4.50



4 PIN Hirose # TM5RA-64 Ivory 4 pin modular jack. Large quantity available. CAT # MT-4WT 2 for \$ 1.00 100 for \$ 35.00 • 1000 for \$ 250.00



Gray RJ-11 jack with 3" color-coded leads. Fits 0.5" wide slot in telephone or chassis. CAT # MT-61 2 for \$ 1.00 100 for 35¢ ea. • 1000 for 20¢ ea.



FILTERED MODULAR JACK

Corcom # RJ11B-4L-B"SIGNAL SENTRY"™ 4 pin, RJ-11 modular jack with built-in ferrite block for inductive filtering. Fits the same space as non-shielded jacks. 0.52" x 0.8" x 0.59" high. UL, CSA listed. Large quantity available. CAT # MT-4F 2 for \$1.00 100 for \$30.00 • 1000 for \$100.00

4 CONDUCTOR HANDSET JACKS

Mate with smaller modular plugs like those found on handset cords.

0.81" x 0.44" x 0.59" high **CAT # MT-4H** 2 for \$ 1.00 10 for \$ 4.50 • 100 for \$ 40.00



0.48" x 0.48" x 0.83" high **CAT # MT-7** 2 for \$ 1.00 10 for \$ 4.50 • 100 for \$ 40.00



PHONE LINE PRIVACY PROTECTOR

Prevents eavesdropping of phone conversations. Protects modem, fax and voice transmissions from interruption. The first device to answer or access a line secures the line. All of the others are denied access until the first device hangs-up. Easy to use. Installs in seconds between phone line and wall jack. Note: You need one unit for each instrument sharing a line.

CAT# TLM-20 2 for \$1.50 • 10 for \$6.50 100 for \$45.00

A/B PHONE SWITCH

Manual A/B switch for telephone or data use. Accepts six-conductor RJ-11 phone plugs. CAT# FNS-2

\$5.50 each



DSL / PHONE FILTER

Excelsus Technologies, Inc. # Z-200SM Z-Blocker® filter effectively filters single-line phone devices (standard or cordless phones, fax machines, answering

machines, etc.) Isolates DSL and home phone line networking signals from voice signal for peak data performance. Ideal for blocking RF interference from cordless phones for uninterrupted video/audio streaming. Easy installation. UL, CSA listed. Complies with FCC part 68 regulations.

CAT# FTR-200 \$ 4.25 each

PHONE PICK-UP

Universal telephone pick-up cup. This device has a suction cup which attaches to the earpiece side of a telephone handset and will pick up both sides of the phone conversation. Terminates to a 3.5 mm plug.

CAT# TPX-1 \$1.50 each

FOUR NUMBER PHONE DIALER

AT&T # 1800 A3A. AT&T automatic phone dialer has four large color-coded, numbered buttons that make it easy to select the desired number. Simple to connect and program, this dialer is ideal for children, the elderly, babysitters, or sight-impaired for emergency services, or any frequently used phone number. Standard 12 button keypad can also be used with rotary-style phones. The touch-tone keypad, alone is well worth the price. 4.22" X 4.22" X 1.7" beige case. CAT# FND-1 \$6.00 ea. • Case of 36 - \$4.00 ea.

EXTRA TOUCH-TONE PHONE

Sturdily constructed telephone that can be used as an extension phone in your garage, studio or office. Designed to hang up when placed face down on any flat surface. However, the

pushbutton that is supposed to disconnect the call may require a small extension tab glued to it in order to hang up the call properly. May have been a promotional item, as it has a logo printed on its back. Beige plastic housing with large white pushbuttons and black numerals. Other features include: redial button, low/high volume switch, lighted keypad and 12" coil cord that extends to 5'. Plugs into standard wall jack.

CAT# PHN-24 \$2.00 each

PHONE HANDSET COIL CORD



9' ivory telephone handset coil cord. 21" when contracted. Small modular 4 pin handset plugs each end. CAT # MCT-5 \$ 1.50 each

Co-Ax Connectors and Cables

BNC CONNECTORS

CAT# 100+

TWIST-ON UG-260 (Fits RG-59 or RG-62 cables) **UG-260TW** 1.00 .85 70



CRIMP MALE 3 piece style (fits RG-59/62 cable) BNC-59



CRIMP MALE 3 piece style (RG-58 cable) BNC-58 .85 .70 .55

55

(NEW)

.50



TWIST ON UG-88 (RG-58 cable) UG-88TW 1.00 .85



CHASSIS MNT FEMALE (SOLDER CUP) BNC-1094 1.00 .85 .70



PC MOUNT FEMALE

Four stabilizing/ ground pins on 0.25" centers.

BNC-9 .65



BULKHEAD MOUNT All metal

body and threaded mounting bushing. BNC-8 1.10 1.25



BULKHEAD MOUNT RIGHT ANGLE

All metal body and threaded mounting bushing.

BNC-8R 1.25 1.10 .85



PC or CHASSIS Mount BNC FEMALE

Plastic body with 2 pins on 0.5" (diagonal) centers. Plastic threaded bushing (no hardware).

BNC-10 1.25 1.10 .85



UG-914 MALE COUPLER

Female both ends UG-914 .60



BNC COUPLER thru chassis

Female both ends

UG-492 1.75 1.40 2.10



UG-491A/U FEMALE COUPLER

Males both ends

BNC-BNC 1.80 1.20



UG-306 RIGHT ANGLE ADAPTOR UG-306 1 60 2 40 2 00



UG-274 BNC SPLITTER

BNC-T 1.50 1.25



BNC-T ADAPTOR (3 female fittings) BNC-T2 1.75 2.10 1 40



IN-LINE BNC FEMALE Amphenol# 31-3321 MS39012/17-010 (RG-122/RG-180) .85 BNC-1 1.00 70

1.00

.80



50 OHM BNC TERMINATOR

BNC-50 1.00 1.20



75 OHM BNC TERMINATOR

BNC-75 .80 1.20 1.00

UHF CONNECTORS

.30

100+



PL-259 PLUG

PL-259

REDUCER FOR RG-58 CABLE (Fits PL-259)

.25 .20

.80

.90

REDUCER FOR RG-59 CABLE (Fits PL-259) .30 .25 .20



CRIMP STYLE PL-259 (Fits RG-59/ RG-62) PL-259C .90 1.00 .80



RT ANGLE PL259 PLUG (Fits RG-59/RG-62) PL-259RT 1.00 90 80



MALE COUPLER PL-258 UHF-UHF .65 1.00 .80



SO-239 CHASSIS MOUNT

SO-239 1.00

.80

ADAPTORS

CAT# 1-9 10-99 <u>100+</u> F FEMALE to RCA MALE F-RCA .65 .50 .75

F FEMALE to BNC MALE F-BNC 1.30 1.10 .90

RCA FEMALE to F MALE RCA-F 1 00 80 60

RCA FEMALE to BNC MALE RCA-BNC .80

UHF FEMALE to BNC MALE

UHF-BNC 1.80 1.50 1 20

.55

1.00

.60

BNC FEMALE to F MALE BNC-F 1.50 1.25

BNC FEMALE to RCA MALE **BNC-RCA** 1.00 .80

BNC FEMALE to UHF MALE **BNC-UHF** 2.00 1.75 1.40

IDC SOCKET CONNECTORS

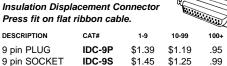
Mates with double row posts on .100" centers. Press mount on standard flat ribbon cable.

CAT#	1-9	10+
RCSC-10	.55	.35
RCSC-14	.60	.50 (NEW)
RCSC-16	.65	.45
RCSC-20	.65	.45
RCSC-26	.75	.55
RCSC-34	.65	.45
	RCSC-10 RCSC-14 RCSC-16 RCSC-20 RCSC-26	RCSC-10 .55 RCSC-14 .60 RCSC-16 .65 RCSC-20 .65 RCSC-26 .75

D-SUBMINIATURE CONNECTORS

I.D.C. D-SUB CONNECTOR Insulation Displacement Connector

Press fit on flat ribbon cable.



DB-25S w/ THREADED STANDOFFS

DB-25S, female connector with built-in 1/8" long threaded standoffs. Solder-cup terminals.



CAT # DB-25SC 75¢ each

10-99 for 55¢ each • 100+ for 40¢ each



SOCKET (fer		PLUG (male)	
DESCRIPTION	CAT#	1-9	10-99	100+
9 pin PLUG	DB-9P	.45	.35	.27
9 pin SOCKET	DB-9S	.49	.39	.29
Hood for DB-9	DB-9H	.39	.29	.22
Right Angle META	L Hood for D	B-9		
	DB-9HRM	1.00	.85	.65
15 pin PLUG	DB-15P	.59	.45	.35
15 pin SOCKET	DB-15S	.69	.49	.38
Hood for DB-15	DB-15H	.39	.29	.22
25 pin PLUG	DB-25P	.69	.50	.35
25 pin SOCKET	DB-25S	.75	.55	.40
Hood for DB-25	DB-25H	.39	.29	.25
Hood for DB-50	DB-50H	.75	.65	.55

Right angle PC mount D-subminiature socket connector DB-25SRT 75¢ each

10 for 65¢ each 100 for 55¢ each



MULTI-CONNECTION CONNECTORS



Male / female ends connected with 10" wires

# of Cond.	CAT#	<u>1-9</u>	<u>10-99</u>	<u>100</u>
2 C C	N-20	1.20	1.00	.80
3 CC	N-30	1.75	1.50	1.20
4 CC	N-40	1.90	1.60	1.30
6 C C	N-60	2.25	1.85	1.50
9 CC	N-90	3.00	2.75	2.20

2 CONDUCTOR, RC BATTERY CONNECTORS



15 Amp, two-conductor locking nylon connectors. Industry standard for remote control cars. 5.5" siliconrubber-insulated leads (18 AWG) are very flexible and heat-resistant.

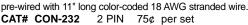
PLUG CAT# CON-210P 75¢ each 10 for 70¢ each • 100 for 60¢ each

SOCKET CAT# CON-210S 75¢ each 10 for 70¢ each • 100 for 60¢ each

PRE-WIRED CONNECTORS WITH MATING HEADERS

Nvlon connectors and mating pc mount, snap-lock headers. Pins on 0.156" centers.

Female socket connector is



4 PIN \$ 1.50 per set CAT# CON-234 6 PIN CAT# CON-236 \$ 2.25 per set CAT# CON-238 8 PIN \$ 3.00 per set

3 INCH JUMPER w/ MATING HEADERS

8 conductor jumper with matching pc mount, snap-lock headers on both ends. 0.1" pin spacing. Color-coded leads.

CAT # CON-88

\$1.75 per set

.1" SNAPPABLE HEADERS

.025" square header pins on 0.1" centers

DOUBLE ROW		45		
DESCRIPTION	CAT#	1-9	10-99	100+
2 X 13 right angle	DHR-13	20¢	15¢	10¢
2 X 16 right angle	DHR-16	30¢	25¢	20¢
2 X 7 straight	DHS-14	20¢	15¢	10¢
2 X 32 right angle	DHR-32	60¢	50¢	40¢
2 X 40 straight	DHS-40	\$1.25	\$1.00	85¢
2 X 40 right angle	DHR-40	\$2.00	\$1.80	\$1.50

HEADER WITH 3 SHORTING JUMPERS

12 pin (2 X 6 pins) double row snappable header prepped with three shorting jumpers, like CAT # SJ-1 below. CAT # SJ-3 4 for \$1.00



ROW DESCRIPTION 1-9 50. .30 SHS-40 40 pin straight

8 pin right angle single row header

SINGLE

CAT# SHR-8 25¢ each 10 for 20¢ each • 100 for 15¢ each



12 PIN EXTRA HIGH HEADER

This snappable header has two insulators in the center. Header leads extend 0.125" above the insulators on top and

bottom. CAT# SHS-12 40¢ each 10 for \$3.50 • 100 for \$30.00

SHORTING JUMPERS FOR HEADERS

Designed for use with above double and single row headers. Used to short out adjoining posts on headers.

1-9 10-99 100+ SJ-1 .10 .08 .07



NON-SNAPPABLE SOCKETS. 0.1" SPACING

SPECIAL - 16 PIN SOCKET

ST0016TBB Non-snappable, 16 pin sip socket. Standard 0.1" spacing. Dual-wipe contacts.

CAT # SIP-16 10 for \$1.25 100 for \$8.00 • 1000 for \$50.00

0.20" high. Non-snappable. Pins on 0.1" centers.

CAT# SIP-207 2 for \$1.00



SNAPPABLE SIP SOCKETS

11 MACHINED PINS

0.1" centers.

CAT# SIP-11 4 for \$1.00

30 PIN. 0.1" centers. CAT# SIP-30 \$1.00 each



2 PIN POLARIZED CONNECTOR

Mating two-pin, polarized connector. Female connector has threaded bushing which mounts in 0.58" diameter hole. Solder lug terminals.



75¢ per set (1Male, 1 Female)



METERS

PM89 SERIES PANEL METERS

3.15" x 2.5" x 2" depth.
2.5% accuracy. Large clear scale, black lettering on white background. Available in a variety of ranges.



DC MICROAMMETERS

	CAT #	EACH	10+
0 - 100 uA DC	PMD-100UA	\$12.00	\$10.00

DC MILLIAMMETERS

	CAT #	EACH	10+
0 - 1 mA	PMD-1MA	\$12.00	\$10.00
0 - 25 mA	PMD-25MA	\$12.00	\$10.00
0 - 50 mA	PMD-50MA	\$12.00	\$10.00
0 - 100 mA	PMD-100MA	\$12.00	\$10.00

DC AMMETERS

	CAT #	EACH	10+		
0 - 1 A	PMD-1A	\$12.00	\$10.00		
0 - 5 A	PMD-5A	\$12.00	\$10.00		
0 - 15 A	PMD-15A	\$12.00	\$10.00		
0 - 30 A*	PMD-30A	\$12.00	\$10.00		
*SHUNT REQUIRED FOR 30A DC AMMETER					
Shunt	FL-30A	\$7.50	\$7.00		

DC VOLTMETERS

0 - 10 V	PMD-10V	\$12.00	\$10.00
0 - 15 V	PMD-15V	\$12.00	\$10.00
0 - 30 V	PMD-30V	\$12.00	\$10.00
0 - 50 V	PMD-50V	\$12.00	\$10.00
0 - 100 V	PMD-100V	\$12.00	\$10.00

AC AMMETERS

0 - 5A	PMA-5A	\$12.00	\$10.00
0 - 15A	PMA-15A	\$12.00	\$10.00

AC VOLTMETERS

0 - 150V	PMA-150V	\$12.00	\$10.00
0 - 300V	PMA-300V	\$12.00	\$10.00

AC VOLT METER

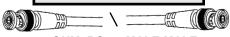
Small 0-200 Vac meter for monitoring AC line voltage. Scale is partitioned into three sections with 0-90V in black, 95-120V in green and above 120V in red. White face, black lettering, indicators line.



indicator line. Clear plastic housing is 1.56" square x 0.87" deep. Display portion of meter is 1.41" x 0.82".

CAT # MET-53 \$1.75 each

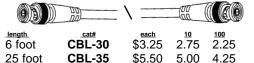
BNC CABLES



50 OHM, RG-58 MALE-MALE

<u>length</u>	cat#	<u>each</u>	<u>10</u>	<u>100</u>
3 foot	CBL-27	\$2.50	2.00	1.75
6 foot	CBL-28	\$3.25	2.75	2.25
15 foot	CBL-29	\$4.25	3.75	3.25
Special	!			
25 foot	CBL-25	\$3.50	3.00	2.50

75 OHM, RG-59 MALE-MALE



DIGITAL PANEL METERS

FEATURES:

*200.0 mV full scale sensitivity
*Single 9-12 Vdc operation
*Decimal point selectable
*Automatic polarity indication
*High input impedance
(>100 M ohm)*Zero reading
for 0 volts input 2.66" x 1.71".

ing .71".

Display size 1.77" x 0.8".
Black plastic case and removable bezel.

Except for PM-102B, digital panel meters must have an isolated power source.

3 1/2 DIGIT LCD DISPLAY

0.5" figure height. Operates on 9-12 Vdc. **CAT # PM-128** \$ 11.95 each

3 1/2 DIGIT LED DISPLAY

SELF-MONITORING Common ground enables meter to monitor its own voltage source. Operates on 5 Vdc. 0.56" figure height. To measure voltages above 200 mV, use add-on board, below.

CAT # PM-102B \$ 14.95 each

Add-on Board for PM-102B Small PC

board with precision divider resistors simplifies voltage & decimal point settings on PM-102B. Allows measurement of voltages to 1000 V. Instructions included. **CAT # AB-102** \$ 6.50 each

LOW COST 3 1/2 DIGIT LCD DISPLAY

Snap mounts into 2.1" X 1.5" chassis cutout. 2.65" X 1.59". **No bezel.** 1.84" x 0.78" display. 0.5" figure height. Operates on 9-12 Vdc. **CAT # PM-200** \$ 7.00 each

Category 5 Patch Cables

Modular data patch cables. RJ45, 8 conductor, 100MHz, UL.

	CAT#	<u>Ea</u> ˜	<u>10</u>	<u>100</u>	
7' Gray	CB-57G	3.90	3.40	2.90	
7' Black	CB-57BK	3.90	3.40	2.90	

COMPUTER CABLES

USB CABLE

5' USB, Universal Serial Bus, A-B, cable. For all standard USB peripherals.

CAT # CB-383 \$3.50 each • 10 for \$25.00

USB CABLE

2' USB, Universal Serial Bus, A-A, cable.

CAT # CB-384 \$2.00 each

PARALLEL PRINTER CABLES



DB25 TO 36 PIN MALE - 6 FT. **CAT# PCB-1** \$3.95 each • 10 for \$32.50

DB25P TO DB25P - 6 FT.

CAT# PCB-3 \$4.50 each • 10 for \$40.00

DB25P TO DB25S - 6 FT. EXT. CABLE **CAT# PCB-5** \$4.95 each • 10 for \$45.00

AUDIO / POWER / SIGNAL PLUGS & JACKS

RCA PLUGS				
	CAT#	1-9	10-99	100+
	RED PLASTIC PPRP-R	HANDLI .30	E .25	.20
	BLACK PLAST	IC HAND	DLE	
	PPRP-B	.30	.25	.20
ATOM	SHIELDED, M			
	MPRP	.50	.45	.35
	CRIMP STYLE	RCA FC	R RG-59)
	RCA-59	.50	.45	.35
	Uninsulated,	metal R	CA	
	RPP-3	.20	.15	.10
RCA JACKS				

	RPP-3	.20	.15	.10
	RCA JA	ACKS		
	SINGLE HOLE (threads from		S MT.	
	RCMJ	.40	.35	.25
	IN-LINE RED	PLASTIC		
	PIRP-R	.30	.25	.20
	IN-LINE BLAC	K PLAST	IC	
	PIRP-B	.30	.25	.20
(a)))))	IN-LINE META	-		
	MIRJ	.45	.40	.30
	DICUT AND	LEDCA	TIALLON	

NEW	RIGHT ANGI	LE PC N	IOUNT	
	RCJ-5W green insulator	5/\$1.00	.15	.08
	RCJ-5G yellow insulato	5/\$1.00 r	.15	.08
	RCJ-5Y red insulator	5/\$1.00	.15	.08
	RCJ-5R	5/\$1.00	.15	.08



FOUR GOLD-PLATED RCA JACKS on 0.5" centers. Each pair has 3 pins, with a common pin for the outer connection of the pair. PC pins for upright mounting. 1.05" x 1.07" x 0.5" thick excluding jacks. CAT# RCJ-41 2 assemblies for \$1.00

	2.5mm	PLUG		
	MONO, PLAS	TIC		
	PMMP	.40	.35	.30
2.5mm JACK				



MONO W/ SWITCH
SMJW-2 .12 .10 .08
Thin solder terminals could be pc
mounted. No hardware available.

3.5mm PL	UGS			
MONO, PLASTIC	C .40	.35	.25	
MONO, METAL MMP	.45	.40	.30	
STEREO, PLAS	TIC .50	.40	.33	
STEREO, META SMPM	.65	.60	.55	
3.5mm JACKS				
	MONO, PLASTIC PMP MONO, METAL MMP STEREO, PLAS SMP STEREO, META SMPM	MONO, METAL MMP .45 STEREO, PLASTIC SMP .50 STEREO, METAL SMPM .65	MONO, PLASTIC PMP .40 .35 MONO, METAL MMP .45 .40 STEREO, PLASTIC SMP .50 .40 STEREO, METAL SMPM .65 .60	



MONO w. N.C. SWITCH Enclosed jack with 3.5mm threaded bushing. Solder terminals. Large quantity available.

MJW-7 .45 .40 .30
500 for 25¢ each • 1000 for 19¢ each

3.5mm JACKS (cont.)					
NEW	CAT# MONO JACK	<u>1-9</u>	10-99	<u>100+</u>	
	MJW-8	.35	.30	.20	
	MONO JACK w	/ n.c. sv	witch		
	MJW	.50	.45	.40	
	MONO JACK w	,			
4 6	5.5" wire leads				
	ESJW-P	.35	.30	.20	
	STEREO w/ N.O	D. SWIT	ΓCH 6mn	n	
	threaded bushir	ng. PC p	oins.		
	MJW-3	.25	.20	.12	
		1000) for \$90.0	00	
	STEREO Jack	w/ n.c. s	switch		
	6 mm threaded	bushing	9		
10 g	SJW-2	.35	.30	.20	
	MONO PLASTI	C, IN-LI	NE		
	MJI	.45	.35	.25	
	STEREO PLAS	TIC, IN	-LINE		
	S.II	60	50	40	

MONO, W/ N	I.C. SWITCH			
	PHJ-S	.60	.50	.40
- (Fig.)	Enclosed, Pla	stic bushir	ng	
	PHJ-3	.75	.70	.60
-3				

1/4" JACKS

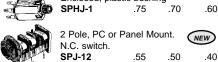
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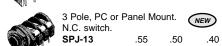
.40

	Enclosed, Me PHJ-1	tal bushing .75	.70	.60
MONO, INLI	NE		1	



SPHJ-S	.75	.70	.60
Enclosed, pla	stic bushi	ng	
SPHJ-1	.75	.70	.60





STEREO, UI	NSWITCHED			
	Enclosed			
**************************************	SPHJ-2	1.00	.85	.65

1/4" PLUGS					
	MONO, PLASTI SPH	C .50	.40	.35	
	MONO, METAL MPHM	.85	.75	.60	
COLIMINATIVA (HEAVY in spring strain-r and strain-relief. MPH-2	lastic ins	-	ip. Built	
	STEREO, RIGHT	T ANGLI .45	E PLAST .35	IC .25	
	STEREO, PLAS PHPS	TIC .75	.65	.55	
	STEREO, META MPHS	L 1.25	1.05	.80	

	BANANA	A PLUG	S	
	CAT# RED PLASTI		10-99	100±
	BPL-R BLACK PLAS BPL-B		.35	.25
	BANAN/	.40		.25
	RED PLASTI BJL-R	.40	.35	.25
	BLACK PLAS BJL-B	STIC CHAS .40	.35	JNT .25
	BINDING	3 POST	S	
	5-WAY BLAC 5-BP-B	K PLASTI .65	C .50	.40
	5-WAY RED I	PLASTIC .65	.50	.40
	DUAL BAN	IANA P	LUG	
	BLACK OR I		<u>10-99</u> STIC	<u>100+</u>
	0.75" spacing Color Subject BP-2		bility. 1.00	.85
	MINI DI	IN PLUC	3	
	MINI DIN IN- MDN-6 1		N MALE F .90	PLUG .80
	DIN P	LUGS		
	3 PIN IN-LIN	E MALE 40	.35	.20
	5 PIN IN-LIN	E MALE 1 75	80° .65	.55
	DIN J	ACKS		
	3 PIN CHAS		NT .35	.25
NEW	4 PIN FEMA			.25
	5 PIN CHAS	SIS MOU	NT 180° .75	.60
	8 PIN CHAS 0.7" dia. threa			t. Will
	function as 5 DIN-8F 1		degree jad .75	.65
3 F	PIN XLR C	ONNEC	TORS	
	CHASSIS M	OUNT FE	MALE	
		4.05"	unting fla	nge
	Metal 1.42": Mounts in 0. Solder lugs. MIKE-3CF			1.50



flange. Mounts in 0.86" diameter hole. Black, break-resistant plastic. PC pins which can be hard wired and soldered. XLF-3 1.00 .85



CHASSIS MOUNT MALE

Metal 1.41" x 0.86" mounting flange. Mounts in 0.75" dia. hole. Solder lugs. MIKE-3CM 1.75 1.50



Plastic 1.27" x 1.03" mounting flange. Mounts in 0.77" diameter hole. Black, break-resistant plastic. PC pins can be hard wired and soldered. XLM-3 1.00

3 PIN XLR CONNECTORS (cont.) 10-99 100+ IN-LINE FEMALE MIKE-3F 2.00 1.75 1.50

IN-LINE MALE MIKE-3M 2.00 1.75 1.50

XLR ADAPTORS



XLR Coupler Male to Male CAT# XLR-320 \$3.75



XLR Coupler Female to Female CAT# XLR-310 \$4.50



XLR Male To 1/4 Plug CAT# XLR-340 \$3.75



D XLR Female To 1/4 Plug CAT# XLR-330 \$4.25

RCA / PHONE PLUG ADAPTORS

RCA jack to RCA jack



CAT# AD-3 75¢ each

RCA jack to 3.5mm mono



CAT# RCA-3.5 \$1.00 each

1/4" mono jack to RCA plug ((((

((C) CAT# 54-421 \$1.00 each

3.5 mm mono jack to

RCA plug

CAT# AD-12 \$1.00 each

1/4" mono to

RCA jack CAT# AD-5 \$1.00 each

1/4" stereo to 3.5 mm stereo



3.5 mm stereo to 1/4" stereo



CAT# ADMP-2 \$1.00 each

3.5 mm mono to 3.5 mm stereo



CAT # ADMP-4 \$1.00 each

3.5mm stereo plug to two 3.5mm stereo jacks

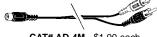


CAT ADMP-5 \$1.50 each

RCA plug to two RCA jacks



RCA jack to two RCA plugs



CAT# AD-4M \$1.00 each

For wall transformers with 3.5 mm mini-phone plugs: Converts 3.5 mm mono phone plug to 2.1 mm co-ax power plug. CAT# AD-13 \$1.00 each

CO-AX POWER PLUGS

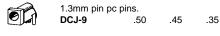


10-99 <u>100+</u> 1.3 mm CO-AX PLUG **DCESID** .50 .40 .30 2.1 mm (.08") CO-AX PLUG DCSID .50 .30 2.5 mm (0.1") CO-AX PLUG .30 **DCLID** .50 .40

D.C. "CO-AX" POWER JACKS

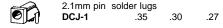
Normally closed shunt opens when plug is inserted. CAT# 10-99 1-9 100+

1.3 mm Mates with CAT# DCESID

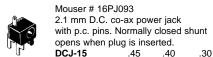


1.3mm pin solder lugs DCJ-13 .45 .35

2.1 mm Mates with CAT# DCSID







2.5 mm Mates with CAT# DCLID



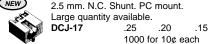
2.5mm pin. Molded DC power jack. P.C. mount .10 .08 .05 1000 for \$45.00

.17



2.5 mm pin. N.C. shunt. Mounts in 0.26" X 0.33" slot. Solder lugs. 25 DCJ-16

1000 for 10¢ each



CABLES W/ CO-AX PLUG / JACKS

DC Co-Ax Power Plugs are commonly used with wall transformers and battery packs.



10' cord with 2.5mm co-ax plugs each end. Grey 18/2 SPT-1 zip cord. CAT# CB-110 \$1.25 each • 10 for \$10.00

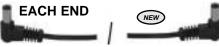
15" CABLE WITH FERRITE BEAD



15" cable. 2.5 mm id coax plugs each end. Ferrite bead for RFI/EMI noise suppression molded 1" from one plug.

CAT # CB-111 85¢ each

1' CABLE W/ 2.5MM COAX PLUGS



CAT# CB-114 85¢ each

1' CABLE W/ 2.5MM COAX PLUG AND



CAT# CB-115 85¢ each

SHIELDED AUDIO CABLES

Single RCA Cables

Shielded one conductor audio cable with RCA style phone plug both ends.

	CAT#	1-9	10-99	100+
6 feet	ACB-6	.85	.75	.70
10 feet	ACB-10	1.00	.90	.85
25 feet	ACB-25	1.50	1.40	1.30

Dual Shielded RCA Cables



Shielded cables with molded color coded RCA pin plugs both ends. Used for stereo/audio hook-up. CAT# 10 1-9

36 inch DCB-36 1.00 85¢ (3 feet)

9 Foot Dual Audio Cable

Black cable. Red and yellow RCA plugs both ends. Special! Large Quantity Available

CAT # DCB-108 \$1.00 each • 10 for \$8.50 100 for \$75.00 • 1000 for \$500.00 144 inch (12 feet) **DCB-144** 2.50

2.00

DUAL SHIELDED CABLE

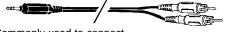
300 inch (25 feet)

48" with 2 RCA style plugs one end bare wire the other end.

DCB-300 3.50

CAT# DCB-4 75¢ each 10 for \$6.50

3.5mm Stereo Plug to two RCA plugs



Commonly used to connect portable audio players to home stereos and to connect speakers to computers.

CAT# 100 Length <u>1-9</u> 5 feet CB-42 1.50 1.25 1.00

5 PIN DIN TO 4 RCA PLUGS

3' cable. Male 5 pin DIN plug to 4 RCA plugs. **CAT # CB-64** \$1.75 each 10 for \$1.50 each • 100 for \$1.00 each

CABLES WITH 3.5MM MONO PLUGS

3.5 mm Mono Plug One End

	CAT#	1-9	10	100
1 foot cable unshielded	CB-112	 50¢	- 40¢	30¢
6 foot cable shielded	CB-361	75¢	65¢	55¢
7 foot cable unshielded	CB-61	60¢	55¢	45¢

3.5 mm Mono Plug Both Ends

		— (II)		b
	CAT#	<u>1-9</u>	<u>10</u>	100
6 foot cable	CB-3561	1.25	1.00	.80
16 ft cable	CB-3582	1.25	1.00	.80

DUAL 3.5MM MINI-PLUGS

Shielded cables with two, two conductor (mono) mini phone plugs at each end.

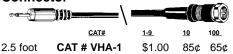


\$1.50 each • 10 for \$12.50 • 100 for \$100.00

3.5 mm Mono Plug to RCA

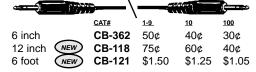


3.5mm Mono Plug to F (Video) Connector



CABLES WITH 3.5MM STEREO PLUGS AND JACKS

3.5mm Stereo Plugs Both Ends



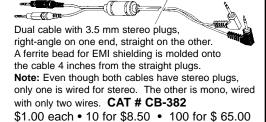
6 foot cable -- Special

Beige cable with 3.5mm stereo plugs each end CB-388 \$1.00 90¢ 70¢ with red pluas with beige plugs CB-387 \$1.00 90*d*: 70¢



Coil-cord with 3.5mm stereo plugs each end. 0.19" dia. black cable. 12 inches retracted. 26" expanded. **CB-120** \$1.50 \$1.25 \$1.00 (NEW)

4' DUAL CABLE WITH FERRITE BEAD



3.5 mm Stereo Jack to 3.5 mm Stereo Plug

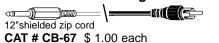


ADAPTOR CABLES with 1/4" PLUGS

1/4" Phone Plug to 1/4" Phone Plug

12" shielded cable. Mono phone plugs. CAT # CB-66 \$ 1.00 each

1/4" Mono Phone Plug to RCA Plug



1/4" Stereo Phone Plug to Two 1/4" Mono Phone Plugs

12" shielded zip cord

CAT # CB-69 \$ 1.00 each

1/4" Stereo Phone Plug to Two RCA Plugs



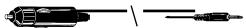
1/4" Stereo Phone Plug to Two RCA Plugs



AUTOMOTIVE POWER CORDS WITH CIGARETTE LIGHTER PLUGS/JACKS

Good quality 6' coil cord. Fused plug with LED indicator. Non-standard coax power plug, needs to be removed for your application. CAT # CLP-48 \$2.00 each

15' CORD WITH 3.5 MM PLUG



Molded 3.5mm mini phone plug on 15 foot 22/2 zip cord. **CAT # CLP-52** \$ 1.75 each

3 OUTLET LIGHTER CORD

Two foot cord, fused, 10 Amp plug at one end and three outlet jacks at other end.

CAT # CLP-46 \$ 3.75 each

Light-duty 5' cigarette lighter cord. Fused cigarette plug one end. Non-standard coax plug other end.

CAT # CLP-55 \$1.25 each 100 for 85¢ each

Good-quality cigarette lighter coil cord. Fused plug with LED indicator. Cord extends 6 feet. Terminates to stripped ends.

CAT# CLP-56 \$3.00 each • 10 for \$2.50 each

CIGARETTE LIGHTER POWER CORD W/3A BLADE FUSE

Black 6' 18/2 SPT-2 cord with ATC blade type fuse holder 6" from plug. Includes 3 amp fuse.

CAT# CLP-58 \$1.25 each

10 for \$1.00 each



POWER SUPPLIES

SWITCHING POWER SUPPLIES MUST BE TESTED UNDER LOAD!

GREAT PRICE! 60 WATT SWITCHING SUPPLY

Autec # UPS61-1004-T Input: 115/230 Vac Outputs: 3.3V @ 4A, 5 V @ 2A, 12V @ 3A, 32V @ 5 mA. New, open-frame switching supply. 5" x 3.46" x 1.68."

"Panasonic-type" two conductor receptacle for AC input, can be hardwired if desired. Fused input. 10 conductor molex-type plug output. Ferrite bead for EMI suppression on output wires. Large quantity available. CAT # PS-70 \$4.50 each Case of 48 pieces for \$3.50 each

50 WATT POWER SUPPLY

Autec # UPS50-2002 Input: 115/230 Vac Outputs: 5 Vdc @ 3 Amps, 12 Vdc @ 3 Amps. Open-frame switching supply. 5" x 3" x 1.8" CAT # PS-532 \$ 6.50 each

5VDC/4A & 12VDC/3A POWER SUPPLY

Autec # UPS51-2002 Input: 115/ 230 VAC. Outputs: 5 Vdc, 4 Amp / 12 Vdc, 3 Amp. 5" x 3" x 1.18" open frame switching supply. CAT# PS-235 \$7.00 each

110 WATT POWER SUPPLY

LiteOn Type 32292 Input: 100 - 240 Vac Outputs: 3 Vdc @ 25 Amps. 5 Vdc @ 15 Amps, 12 Vdc @ 1 Amp. Open-frame switching power supply made for 3 Com (Part# 10013058). EMI filtered input accepts standard IEC power cord. Outputs through 4.5" long wire leads terminated with a special 15 pin

connector. Also has a D-sub type connector for outputs. 8.5" x 3.5" x 2" high. I/O end of board is 4.5" wide. UL, CSA.

CAT # PS-322 \$8.50 each

150 WATT POWER SUPPLY

Cherokee International # MQT154A1 Input: 100 - 240 Vac, 47 - 63 Hz, 3 Amp Outputs: +5 Vdc @ 26 A, 3.3 Vdc @ 8 A, -12 Vdc @ 1 A, +12 Vdc @ 6 A. Switching power supply with 0.14" thick aluminum enclosure on three sides. 8" x 4.25" x 1.5." Line and load regulation. Current

limiting. Voltage adjustment. Overvoltage setting. Remote sensing. UL, CSA. Hook-up/spec sheet included. Large quantity available. CAT # PS-155 \$10.50 each • 10 for \$9.00 each

222 WATT POWER SUPPLY

Teapo Model # TP511B-4 Input: 100-240 Vac Outputs: 5.1VDC @ 32A, 12VDC @ 6A, -5VDC @ 0.3A, -12 Vdc @ 0.3A, 3.3VDC @ 24A. Enclosed, fan-cooled

computer power supply. Push on/off power switch on 12" cord. Has special power harness in addition to the common Molex-type power connectors. IEC power inlet. UL, CSA. 5.9" x 5.5" x 3.4."

CAT # PS-511 \$ 16.50 each Case of 8 for \$12.00 each

INCREDIBLY CHEAP! ENCLOSED SWITCHING SUPPLY

Voltek Corp # SPEC7188B Input: 100 - 240 Vac Outputs: + 5 Vdc @ 3.70 A +12 Vdc @ 0.60 A, -5 Vdc @ 0.05 A,

+5 Vdc Trickle @ 0.1 A Metal encased switching

supply. Standard three-prong IEC socket power input. 7 conductor, Molex-type connector output. 9" x 2.1" x 1.36". UL recognized. Removed from new equipment.

CAT # PS-27 \$ 3.50 each

25 WATT POWER SUPPLY

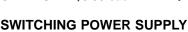
Autec # UPS25-1002T Input: 115v/1.5A 230V/0.75A Output: 5V @ 1.9A, 12V @ 1.6A. 25 Watt switching supply mounted on an L-bracket, 9" x 2.27" x 2.25" overall. Standard three prong IEC

socket power input. On-Off rocker switch. Molex-type connector output. UL, CSA recognized. CAT# PS-251 \$4.25 ea. • 10 for \$3.50 ea.

POWER SUPPLY, 5V/3A & 12V/3A

Martec # PV150-21TA Input: 100-240 Vac. Output: 5 Vdc @ 3 Amps, 12 Vdc @ 3 Amps. 5" x 3" x 1.75" high

open frame supply. CAT# PS-21 \$6.50 each



Y.K. Systems # KM624LC-6 Input: 115 Vac Outputs: 3.3V, 5V, 12V, 15V, 22V, 32V, -12V Current rating unknown. Open-frame switching supply 7.38" x 3.5" x 1.46." Output through 12 pin Molex-type socket

connector on 11" leads. CAT # PS-104 \$ 3.50 each

MANUFACTURERS

We Purchase Excess Inventories. CALL, WRITE, E-MAIL or FAX your list.



19 WATT POWER SUPPLY

Skvnet # ARC-2133 Input: 115 / 230 Vac Outputs: 5 Vdc @ 0.7A and 12 Vdc @ 1.3A 6.75" x 3.75" x 1.1. 9" wire leads with Molex-type connectors for output. 115/230 V selector slide switch. UL, CSA CAT # PS-2133 \$3.50 each

SINGLE OUTPUT SWITCHING **POWER SUPPLIES**

Ideal for scanners, cameras and sensitive equipment requiring a constant, regulated output. All of the following operate on 120 Vac. UL, CSA.

SPECIAL PURCHASE! 5 VDC 1.9 AMP

Autec # DT25-1004. Input 100-240 Vac Output: 5 V @ 1.9 Amp, 8 V @ 1.1 Amp, 15 V @ 0.36 Amp, -15V @ 0.09 Amp. 3.25" x 6.39" x 2.35" h. 7' 6" output cord is terminated with custom connector. Requires detachable IEC power cord like our CAT# LCAC-60. UL, CSA listed. CAT# PS-531 \$5.00 each • 10 for \$4.50 ea 50 for \$4.00 each 100 for \$3.50 each

5 VDC 2 AMP

Sceptre #LPS-001 Regulated linear power supply. Table-top style case with grounded 6' power cord and 6' output cord with 2.5mm

ID coax plug, center negative. Case size: 5.12" x 3.65" x 2.72." UL, CSA.

CAT # PS-52 \$ 9.00 each

5 VDC 2 AMP Uniq Technologies, Inc. # SYS1089-1005L-W2. Plug-in style. 6' cord terminated with 2.1mm coax power plug, center positive. UL, CSA. CAT# PS-522 \$6.50 each 10 for \$5.50 each

5 VDC 2.4 AMP

GLOBTEK # SA-052A4F-11 Input: 100-250 Vac. Output 5 Vdc @ 2.4 Amps. 6' cord with 2.1mm coax power plug. Center positive. Includes detachable IEC power cord for 120 Vac.

CAT# PS-524 \$7.75 each

5.7 VOLT 840 MA

Philips Type 10PS206/17. 6' cord terminated with 1.3 mm i.d. coax power plug, center positive. Ideal for scanners, cameras and sensitive equipment requiring a constant, regulated output. Operates on 120 Vac. UL, CSA. CAT# PS-578

\$5.50 each • 20 for \$5.00 each

6.5 VOLT 700 MA

Phillips Type FW 7221 6 foot cord terminated with a 1mm I.D., 3mm O.D. coax power plug. Tip positive. Fused. CAT # PS-657 \$5.50 each



6.5 VDC 5 AMP

Elpac # 8B5047 Input: 95-250 Vac Output: 6.5 Vdc @ 5 Amps Enclosed switching power supply. Table-top style case, 6.38" x 3.80" x 2.70". 6' output 4

cord is terminated with an odd mini-din plug which will need to be cut off. Requires a detachable IEC power cord like our LCAC-60.

CSA approved. CAT# PS-655 \$11.75 each

12 VDC 1.25 AMP

DVE # DSA-0151-12 2.1mm I.D. coax power plug. Center positive. UL, CSA.

CAT # PS-1215

\$7.25 each

10 for \$ 6.95 each • 100 for \$ 6.50 each

12 VDC 3.5 A SWITCHING POWER SUPPLY

Elpac # WR14212. Input: 95-250 Vac. Output: 12 Vdc @ 3.5 Amps. Fully enclosed switching power supply. Table-top style plastic case,

6.38" x 3.75" x 2.7." Line and load regulation. Overvoltage and overcurrent protection. Short circuit protection. IEC input with level B EMI filter. Detachable IEC power cord included. 6' output cord terminated with a 5 pin DIN plug. UL, CSA.

CAT # PS-1242 \$18.00 each

12 VDC 6 AMP SWITCHING **POWER SUPPLY**

Elpac #W7212. Input: 95-250 Vac. Output: 12 Vdc @ 6 Amps. Fully enclosed switching power supply. Table-top style plastic case,

6.38" x 3.75" x 2.7." Overvoltage and overcurrent protection. Short circuit protection. IEC input with level B EMI filter. Detachable IEC power cord included. 6' output cord terminated with a 5 pin DIN plug. UL, CSA.

CAT# PS-1244 \$26.00 each

13 VDC 1 AMP

Qualcomm # TAACA0035 DC coax power plug, 2.1mm I.D., 5.5mm O.D., center positive. Wall plug style. **CAT # PS-131**

\$6.50 each



1 AMP SWITCHING POWER SUPPLY with SELECTABLE OUTPUT 3 - 4.5 - 6 - 7.5 - 9 - 12V

The perfect power supply for audio / video / telephone / communication/ small appliances / any device that normally uses a wall transformer. Provides all of the popular voltages between 3 and 12 Vdc, and it's regulated, so the voltage doesn't fluctuate when the load varies. A good multi-voltage lab

supply for breadboard projects up to 1 Amp. Includes a set of seven of the most popular power connectors.

CAT # PS-10 \$12.95 each



ADJUSTABLE POWER SUPPLY 0 - 15 VOLTS DC **30 AMP**

Zurich # DS-304M 0 - 15 Vdc fully adjustable bench supply. 25 Amps continuous. 30 Amps peak. 1% line load regulation. Short circuit and overload protection. Switchable meter for volts and amps. Lighted power switch. Bindingposts, spring level terminals, and cigarette lighter socket outputs. 6.5" H x 6" W x 8.38" D. Wt 19 lbs.

CAT # PS-2512 \$165.00 each

ADJUSTABLE LAB POWER **SUPPLY 90 WATT**

30 Vdc @ 3 Amp. Constant voltage and current. Coarse and fine adjustments for voltage and current. Overload protection. Dual displays for voltage and current. Color-coded terminals for positive, negative and ground connections. Can be used in series or parallel with other power supplies.

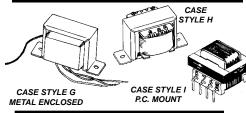
Operates on 110 or 220 Vac.11.75" x 5" x 6"H.Available with digital or analog meters. 1 year warranty.

w/ Digital Meters

CAT # PS-303 \$145.00 each

w/ Analog Meters

CAT # PS-304 \$135.00 each



POWER TRANSFORMERS

All power transformers have 115 vac 50/60 hz primaries unless otherwise noted.

12 V.C.T. @ 2 AMP

1.625" high X 2" X 1.5". CASE STYLE H **CAT# TX-122** \$5.00 each

12 V.C.T. @ 3 AMP

STYLE H 2 1/3" h. X 2 3/4" X 2 1/4". CAT# TX-123 \$6.00 each

12 V.C.T. @ 4 AMP 2" high X 2 11/32" x 2". STYLE H CAT# TX-124 \$7.50 each

12 V.C.T. @ 5 AMP

2 1/4" h. X 2 3/4" X 2 1/4" STYLE H

CAT# TX-125 \$9.50 each

12.6 V.C.T. @ 1 AMP

1.71" h. X 1.55" X 1.36". CASE STYLE H CAT# TX-121 \$4.25 each • 10 for \$40.00

12.6 VOLT @ 25 AMP STYLE H

Primary: 100 Vac or 115 Vac. Secondary: 12.6 Volts @ 25 Amps. 3.5" X 3.75" X 4.25" high. 6" wire leads for input. 0.25" qc tabs for output. CAT# TX-12625 \$20.00 each

24 V.C.T. @ **1 AMP** 1 5/8" high X 1 5/8" X 2". CASE STYLE H CAT# TX-241 \$5.00 each

24 V.C.T. @ 2 AMP 2" high X 2 3/8" X 2". CASE STYLE H CAT# TX-242 \$7.50 each

24 V.C.T. @ 2.4 AMP

Signal Transformers # 241-7-24 2.7" X 1.81" X 2.25" high. CASE STYLE H. UL. CAT# TX-2424 \$9.50 each

24 V.C.T. @ 3 AMP 2 1/4" X 2 3/4" X 2 1/4". CASE STYLE H CAT# TX-243 \$12.50 each

24 V.C.T. @ 3.3A or 12V @ 6.6A SPLIT **BOBBIN TRANSFORMER**

MCI # 4-49-6024. Dual primary: 110/220 Vac input. Secondaries: 24 Vct @ 3.3A - series or 12 Volts @ 6.6 A - parallel 2 1/2" x 2 3/8" x 3" high. 3/16" quick-connect or solder lug terminals. UL, CSA, VDE.

CAT# TX-2433 \$13.75 each

24 V.C.T. @ 4 AMP

2.60" high x 3.10" x 2.12". Case style H (Mounting holes 3.50" centers)

CAT # TX-244 \$13.50 each

24 V.C.T. @ **5 AMP** 3 1/2 high X 3" X 3". CASE STYLE H CAT# TX-245 \$16.00 each

25 VOLT CT, 2 AMP

CASE STYLE H. Magnetek Triad # F41X. 25.2 VCT @ 2 A continuous rating. 3" x 2.2" x 2.6" high. Mounting holes on 3.5" centers. 6" wire leads. CAT # TX-252 \$8.50 each

28 VOLT, 1.5 AMP CASE STYLE H 2" high x 2.37" x 2.45". with wire leads. CAT # TX-2815 \$3.50 each

40 VCT @ .25 AMPS TRANSFORMER

CASE STYLE H. 1.95" x 1.8" x 1.66" high. Mounting holes on 2.35" centers.

CAT# TX-4025 \$2.25 each 80 for \$ 1.75 each



50 V.C.T. @ 2 AMPS

ATC-Frost # MI1210 Rev 1. CASE STYLE H. 3.1" x 2.3" x 2.6" high. 6" wire leads. CAT # TX-502 \$ 11.00 each

60 V.C.T. @ 2 AMPS

VFT, LLC # MI1128. CASE STYLE H. 3.1" x 2.5" x 2.6" high. Solder terminal inputs. 11" wire leads out-CAT# TX-602 \$ 11.00 each

70 V.C.T. @ 1.5 AMPS

ATC-Frost # MI1211. CASE STYLE H 3" x 2.5" x 2.5" high. 6" wire leads. CAT # TX-7015 \$ 11.50 each

P.C. MOUNT TRANSFORMERS

All PC Mount Transformers CASE STYLE I

10 VCT @ 1.2A or 5V @ 2.5A

Tranex - Dual Primary: 115/230 Vac 2.51" X 2" X 1.04" high. CAT# PCTX-1012 \$4.00 each

12VCT @ 0.35A or 6V @ 0.7A

Dual Primary: 115/230 Vac. 1.89" x 1.5" x 0.84" high.

CAT# PCTX-1225 \$2.50 each

16 VCT @ .8A or 8V @ 1.6A

Stancor # DSW-516 Dual Primary: 115/230 Vac. 1.9" x 1.59" x 1.5" high.

CAT # PCTX-168 \$4.00 each

20 VCT @ 0.2A or 10V @ 0.4A

Dual Primary: 115/230 Vac. 1.89" x 1.5" x 0.84" high.

CAT# PCTX-2035 \$2.50 each

20 VCT @ 0.6A or 10 V @ 1.2A

Stancor # SW-520 115 Vac primary

1.44" x 1.56" x 1.88".

CAT # PCTX-2061 \$ 4.00 each

20 VCT @ 1.2A or 10 V @ 2.4A

Signal # DPC20-1200 Dual Primary: 115/230 Vac. 1.62" x 2.25" x 1.37" high.

CAT # PCTX-2012 \$ 5.00 each

115 VAC TRANSFORMERS WITH MULTIPLE SECONDARIES

6.3 V @ 3A AND 24 VCT @ 0.6A STYLE H 2.2" x 2" x 1.9" high. Wire leads. CAT # TX-624 \$ 3.50 each

12V @ 1A AND 50V @ 0.5A

Dual primary: 115/230 Vac. Two secondaries, approximate ratings: 12V @ 1 Amp, 50V @ 0.5A. Split bobbin transformer. 2.64" x 2.19" x 2.25." Mounting holes on 1.75" x 2.2" centers."

CAT # TX-1250 \$ 3.50 each

100 VA ISOLATION TRANSFORMER

Powertec USA# 02-0010 Primary: 120 V, 60 Hz Secondary: 120 V, 100 VA 3.1" x 2.6" x 2.7" high. Solder-lug terminals. Mounting holes on 3.5" centers. CAT # ITX-4 \$ 9.75 each



600 OHM PHONE/DATA COUPLING TRANSFORMER

Prem Magnetics # SPT115. 600 Ohms primary/secondary impedance. 1:1 turns ratio. Resistance, primary/secondary: 6 3 Ohm/88 Ohm. Frequency response: 300-3500 Hz +or- 0.5dB. 1.02" x 0.91" x 0.78" high.

CAT# TCX-115 50¢ each

10 for 35¢ each • 100 for 27¢ each

TOROIDAL POWER TRANSFORMERS

26 VCT @ 2 AMPS (SERIES) OR 13 VOLTS @ 4 AMPS (PARALLEL) AND 7 VOLTS @ 0.6 AMPS

117 Vac primary. Three secondary windings. One 7 Volt, 0.6 Amp and two 13 Volt, 2 Amp secondaries which can be hooked in series or parallel for 13 or 26 volts. 3.9" dia. x 1.12".

\$9.50 each CAT # TTX-37038

36 VCT @ 0.65 Amps

Primary: 115 / 230 Vac Secondaries: 36 Vct @ 0.65 Amps and 48 Vac @ 0.1 Amps. 3" diameter x 1.33."

CAT # TTX-3660 \$ 5.00 each

36 VCT @ 2 Amps

Primary: 100 - 120 Vac Secondaries: 36 Vct @ 2 Amps and 48 Vac @

0.15 Amps. 3.64" diameter x 1.6." CAT # TTX-362 \$ 14.50 each

REDUCED

8.5 Volts @ 1.1 Amps

Primary: 115 / 220 Vac Secondaries: 8.5 Volts @ 1.1 Amps and 14.9 Volts @ 0.53 Amps. 2.8" dia. x 1.13." Includes mounting hardware.

CAT # TTX-0032 \$ 4.00 each

Input: 110 vac Output: 0 - 130 vac

Fully enclosed variable transformers in ventilated steel cases with 6' power cord, 3 prong grounded receptacle, output voltage meter, on/off switch, fuse and power cord. Portable or mountable. Useful in a

variety of applications where adjustment of AC line voltage is desireable. Available in 4 sizes.

3 AMP VARIABLE TRANSFORMER 5.35" X 4" X 5.5" high. Weight: 6.5 lbs. CAT # SC-3M \$45.00 each

> **5 AMP VARIABLE TRANSFORMER** 4.75" X 7" X 6" high. Weight: 8 lbs. CAT # SC-5M \$95.00 each

10 AMP VARIABLE TRANSFORMER 6.5" x 9" x 6" high. Weight: 20 lbs. CAT # SC-10M \$135.00 each

20 AMP VARIABLE TRANSFORMER 6.5" x 9" x 7.5" high. Weight: 22 lbs. CAT # SC-20M \$165.00 each

7.5 TO 9 VDC WALL TRANSFORMER

Stancor AC Adaptor # STA-4175A. Standard wall transformer with dual output rating. Voltage depends on load (This is actually the case with all wall transformers). Rated 7.5 Vdc @ 500 mA or 9 Vdc @ 300 mA. Power cord is terminated with a 2.1mm i.d. coax power plug, center negative. New, individually boxed. UL, CSA. CAT# DCTX-4175

\$4.50 each • 100 for \$3.50 each



WALL TRANSFORMERS







STYLE D Screw Terminals

A.C. WALL TRANSFORMERS

	VOLTS	AMPS	TERMINATION	STYLE	CAT#	PRICE	100 +
	9 Vac	450 ma.	2.1mm co-ax	С	ACTX-945	\$2.50	\$1.75
	10 Vac	1.7 amp	2.5mm co-ax	С	ACTX-1017	\$2.50	\$1.75
	10 Vac	2.4 amp	2.5mm co-ax	С	ACTX-1024	\$3.85	\$3.00
_	11 Vac	2.4 amp	2.1mm co-ax	С	ACTX-1124	\$3.85	\$3.00
NEW	12 Vac	2.08 amp (25VA)	Screw terminals	D	ACTX-1225	\$4.00	\$3.00
	15 Vac	400 amp	3.5mm phone plug	С	ACTX-154	\$2.25	\$1.50
	15 Vac	2.4 amp	2.5mm co-ax	С	ACTX-152	\$4.25	\$3.25
	16 Vac	1.1 amp	2.1mm co-ax	С	ACTX-161	\$3.50	\$2.50
	16.1 Vac	1.86 amp (30VA)	Screw terminals	D	ACTX-163	\$3.00	\$2.50
	18 Vac	3.33 amp (60VA)	Bare wire	Α	ACTX-186	\$3.50	\$2.50
	19 Vac	1.26 amp	3.5mm phone plug	С	ACTX-192	\$3.00	\$2.25
	24 Vac	830 ma. (20VA)	Screw terminals	D	ACTX-2420	\$5.50	\$4.50
NEW	24 Vac	1.6 amp (40VA)	Screw terminals	D	ACTX-2440	\$6.00	\$5.00

D.C. WALL TRANSFORMERS

	VOLTS	AMPS	TERMINATION	CENTER	STYLE	CAT#	PRICE	100+
*	3 Vdc	100 ma	2.5 mm phone plu	g positive	С	DCTX-31	\$1.35	\$1.00
	3 Vdc	200 ma	unknown co-ax	positive	С	DCTX-321	\$1.50	\$1.10
	4.5 Vdc	500 ma	1.6 mm co-ax	positive	С	DCTX-455	\$3.00	\$2.00
	6 Vdc	300 ma	3.5 mm phone plu	g negative	С	DCTX-630	\$3.00	\$2.50
	6 Vdc	1.5 amp	2.5 mm co-ax	positive	С	DCTX-615	\$5.00	\$3.75
	7.5 Vdc	1.2 amp	2.1 mm co-ax	positive	С	DCTX-7512	\$5.00	\$3.75
	7.5 - 9	500-300ma	2.1 mm co-ax	negative	С	DCTX-4175	\$4.50	\$3.50
	8.5 Vdc	1.2 amp	2.1 mm co-ax	negative	С	DCTX-8512	\$5.00	\$3.75
	9 Vdc	100 ma.	2.1 mm co-ax	negative	С	DCTX-918	\$2.50	\$1.75
	9 Vdc	150 ma.	2.1 mm co-ax	negative	С	DCTX-9151	\$2.50	\$1.75
	9 Vdc	170 ma.	2.1 mm co-ax	negative	С	DCTX-917	\$2.50	\$1.75
	9 Vdc	200 ma.	2.1mm co-ax	positive	С	DCTX-920	\$2.75	\$2.00
	9 Vdc	500 ma.	2.1 mm co-ax	negative	С	DCTX-958	\$4.50	\$3.50
	9 Vdc	1 amp	2.1 mm co-ax	positive	С	DCTX-914	\$4.00	\$3.00
	9 Vdc	1 amp	2.5 mm co-ax	negative	С	DCTX-919	\$4.00	\$3.00
	10.5 Vdc	730 ma	2.1 mm co-ax	negative	Α	DCTX-107	\$4.00	\$3.00
	12 Vdc	200 ma.	2.1 mm co-ax	positive	С	DCTX-122	\$3.00	\$2.25
	12 Vdc	200 ma	2.1 mm co-ax	negative	С	DCTX-1222	\$3.00	\$2.50
_	12 Vdc	300 ma	1.7 mm co-ax	positive	С	DCTX-1234	\$3.50	\$2.50
NEW	12 Vdc	400 ma	cigar plug		С	DCTX-1242	\$3.75	\$2.75
	12 Vdc	500 ma	2.5 mm co-ax	positive	С	DCTX-1252	\$4.50	\$3.50
	12 Vdc	800 ma	2.1 mm co-ax	positive	С	DCTX-1284	\$4.75	\$3.50
	12 Vdc	800 ma	2.5 mm co-ax	positive	С	DCTX-1282	\$4.75	\$3.50
	12 Vdc	1 amp	2.1 mm co-ax	positive	С	DCTX-1216	\$5.00	\$3.85
	13 Vdc	800 ma	2.5 mm co-ax	positive	С	DCTX-1310	\$4.75	
	14 Vdc	360 ma	2.5 mm co-ax	positive	С	DCTX-1436	\$3.50	\$2.75
	15 Vdc	900 ma	2.1 mm co-ax	positive	С	DCTX-1590	\$4.25	\$3.25
	24 Vdc	600 ma.	2.1mm co-ax	positive	С	DCTX-246	\$4.50	\$3.50
со-ах	plug 🖼		phone plug			cigar plug	=4	

For regulated plug-in-wall switching power supplies see pages 55 and 56

UNIVERSAL DC POWER ADAPTER

Power cassette players, CD players, radios, games and "handy-talkies" with one universal wall transformer. Six voltage settings from 3 to 12 Vdc. Universal power plugs that fit almost every product including "Walkman" style devices. Polarity switch and LED indicator. UL and CSA listed. 500 mA. **CAT # MOA-500** \$7.50 each



Excellent for LEDs and low current applications. 3 Vdc, 100 mA wall transformer. 6' cord. 2.5mm mini-phone plug, tip positive. Large quantity available. UL. **CAT# DCTX-31** \$1.35 each • 10 to 95 for \$1.25 each 96 to 575 \$1.00 ea. • 576 to 1055 75¢ ea. • 1056 or more 65¢ ea.



AUDIO LINE MATCHING TRANSFORMERS

25 / 70 VOLT Inputs for 25 or 70 Volt line. Output for 8 ohm, 10 Watt speaker.1.67" x 1.97" X 1.50" CAT # LMT-2 \$2.00 each • 10 for \$17.50

ERMINAL STRIPS

SINGLE ROW BARRIER STRIP



TYPE B Feed -Thru mounting (







No. of screws	Term. centers	Amps	Тур	oe CAT#	Price	<u>50+</u>
2	.43"	20	В	TER-29	2/\$1.00	.30
3	.43"	30	Α	TER-30	4/\$1.00	.18
4	.43"	20	Α	TER-400	3/\$1.00	.20
5	.375"	20	В	TER-52	3/\$1.00	.20
6	.43	20	Α	TER-600	2/\$1.00	.30
8	.375"	15	Α	TER-800	2/\$1.00	.30
numb	pered 1-9	9, left-	to-ri	ght		
9	.375"	20	Α	TER-901	2/\$1.00	.30
numb	pered 1-9	9,right	-to-l	eft		
9	.375"	20	Α	TER-902	2/\$1.00	.30
10	.375"	20	Е	TER-102	2/\$1.00	.30
12	.375	20	D	TER-125	2/\$1.20	.50

PC STRIPS W/ HEAVY TERMINALS

2 SCREW - Beau 1200 series. Dark green thermoplastic. 1.41" x 0.56" x 0.45" high. Screws on 3/8" centers. Mounting holes on 1.08" centers. 0.1" diameter PC terminals for heavier current applications.

CAT # TER-200 5 for \$ 1.00 100 for \$ 12.00 • 1000 for \$ 80.00

DUAL ROW TERMINAL STRIPS

2 POSITION FEED-THROUGH

Kulka 601. Space-saving 2 position feed-through strip with mounting holes between the two terminals. 20 Amps. 1.19" x 1.13" x 0.52" high.



CAT # TS-220Y 50¢ each

2 POSITION, **40 AMP STRIP**

TRW Cinch # 2-150. 2.5" x 1.18" x 0.75" high. 10-32 screws accept up to # 10 wire. Terminals on 11/16" centers.

CAT # TS-250 \$1.50 each

3 POSITION

TRW/Cinch. 3 position 20 amp double row barrier strip.



0.43" terminal centers. 2.06" x 1.37" x 0.68" high. Mounting holes on 1.75" centers.

CAT# TS-314 75¢ each

4 POSITION, 50 AMP

Beau 28004. New barrier strip prepped with one jumper, one quick-connect terminal and two solder terminals. These items can be easily removed

or relocated on the strip. 11/16" terminal centers. 10-32 screws. 3.9" x 1.8" x 0.75." UL, CSA.

CAT # TS-6034 \$1.75 ea. • 10 for \$1.50 ea.

5 POSITION 30 AMP

Cinch 5-142. 3.77" x 1.31" x 0.62" high. 8-32 screws accept up to #10 wire. Terminals on 0.563" center spacing.

CAT# TS-542 \$2.50 each

70AMP EUROSTYLE TERMINAL STRIPS



For connecting stripped wires from 8 - 22 AWG depending on the block size. Flexible white (natural) Nylon 66 body, 94V2 rated for 105 C degrees. 400 Volts. All metal parts are completely recessed in the housing to prevent shorts. Each strip has 12 circuits, with a mounting hole between each circuit. Can be easily shortened with a knife or saw.

7 AMP

For 22-18 wire. 3.78" x 0.67" x 0.57" high. 0.32"(8mm) terminal centers. UL, CSA, VDE. CAT # TB-7 \$2.00 each 10 for \$1.80 each • 100 for \$1.60 each

20 AMP

For 18-14 wire. 4.6" x 0.80" x 0.67" high. 0.39"(10mm) terminal centers. UL, CSA, VDE. CAT # TB-20 \$2.25 each 10 for \$2.10 each • 100 for \$1.80 each

35 AMP For 14-10 wire. 5.51" x 0.93" x 0.74" high. 0.47"(12.2mm) terminal centers. UL. CAT # TB-35 \$2.70 each 10 for \$2.45 each • 100 for \$2.15 each

50 AMP For 20-8 wire. 6.25" x 1.00" x 0.99" high. 0.53"(13.5mm) terminal centers. UL. CAT # TB-50 \$3.25 each 10 for \$2.95 each • 100 for \$2.60 each

70 AMPS @ 500 VOLTS

6.75" x 1.18" x 1" high. CAT # TER-12 \$3.75 each • 10 for \$3.25 each

SCREW-CLAMP STRIPS

16 POSITION

Weco # 960-DS/16. 5.08 mm (0.2") terminal centers. Fits 26-12 AWG wire 3.24" x 0.35" x 0.51" high. Rated 20 Amps @ 300 Volts. UL. CSA.

CAT # TER-160 \$ 1.75 each

PRESS-FIT® TEFLON TERMINALS

Sealectro # FTMM9SL. Teflon-insulated solder posts. Press fit into 1/16" dia. hole. Sold in bags of 500 only.

CAT #TT-3 \$10.00 per 500 pc bag.



FLASHING LIGHTS

For alarm systems, discos, personal use, warning in case of danger, etc. Long-life xenon tube. Protected against polarity reversal. Fully sealed and waterproof. Power supply: 12 Vdc, 150 mA.

Flash rate: 120/min. 2.75" diameter X 1.70".

Acrylic cover with black ABS base. Threaded mounting studs on 1.7" centers. Hardware included.

<u>color</u>	CAT#	<u>price</u>
red	STROBE-3R	\$8.95 each
green	STROBE-3G	\$8.95 each
blue	STROBE-3B	\$8.95 each
amber	STROBE-3A	\$8.95 each
clear	STROBE-3C	\$8.95 each



20 Watt miniature strobe unit with a 2.32" x 1.28" polished reflector. Flash rate is adjustable from 2 to 10 flashes per second. Flash tube rated to 100 million flashes. 5" x 3.3" x 2" case with mounting bracket. Operates on 115 vac.



CAT # STROBE-2 \$ 19.95 each

FLASHERS

BICYCLE HALOGEN HEADLAMP AND LED FLASHER





For riding or walking at night this headlamp and taillamp set is just the thing. Comes with mounting clamps for handlebars and seat post. Rear LED flasher has 5 ultra-bright LEDs which can be set on one of 7 eye-catching flashing patterns. LED flasher has belt clip for walking at night. Lamp requires 2 C cells. LED flasher requires 2 AA cells. Batteries not included.

CAT # FL-14 \$ 7.50 per set

Variable LED FLASHER Safety Light

5 ultra-bright LEDs in a red reflector case. This versatile safety device can be seen over long distances at night. Includes clip for belt or bag, strap for armband and hardware for attachment to bicycle. Can be set for one of six different chaser or flashing patterns. Water resistant. Requires 2 AA batteries (not included). CAT # FSH-6 \$ 4.95 each

#552 AUTOMOTIVE FLASHER

Heavy-duty 2 terminal 12 Vdc flasher cars, truck and trailers. 1.34" diameter x 1.05" metal can. **CAT # FSH-552**





\$ 3.75 each 10 for \$ 3.50 each

STROBE LIGHT

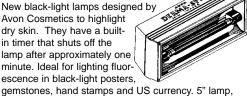
30 candela xenon strobe. Mounted on a 4.58" square plastic wall plate, there is 0 probably another part of plastic rim to cover the plate. Flash Q rate is 1 flash per second at 24 Vdc (20 - 31 Vdc). The 0 strobe, itself, is enclosed in a plastic housing in the middle of the wall plate, 4.04" x 1.19" x 2.6" high with a clear polycarbonate dome over the lamp. Will operate at 12 Vdc with a

flash rate of 30 flashes per minute. CAT# STROBE-4 \$12.75 each

10 for \$11.50 each

UV BLACKLIGH

New black-light lamps designed by Avon Cosmetics to highlight dry skin. They have a builtin timer that shuts off the lamp after approximately one minute. Ideal for lighting fluor-



F4T5BLB, is housed in a lightweight plastic case. 7" x 3.25" x 2.3" high. Operates on 12 Vdc. Power input is through a 2.5mm coax power jack, center positive. CAT# UVL-2 \$5.00 each

RECOMMENDED POWER SUPPLY FOR UVL-2 12V 500ma. CAT# DCTX-1252 \$4.50 each

COMPUTER ACCESSORIE

THREE BUTTON SERIAL

MOUSE Windows compatible three button serial mouse. Includes 3.5" floppy disk

with drivers. CAT# MSE-3 \$3.50 each 10 for \$30.00



Be

WINDOWS COMPATIBLE KEYBOARD

Genica "Soft-touch" keyboard, 107 key keyboard for Windows 98/2000/NT/ME.

Standard PS/2 Interface



3 BUTTON MOUSE

Attractive, ergonomically designed, 3-button mouse. PS/2, mini-DIN interface. Plug & play with Windows 95, CAT # MSE-4 \$3.25 each • 10 for \$30.00



COPY HOLDER FOR LAPTOR

Curtis "Copy Clip." Holds paper up next to your screen for easy referral or transcription. Mountable on right or left side of computer. Slides away when not in use.

CAT# CH-6 \$1.50 each



POTENTIOMETERS

POTS W/6mm SHAFT

All of the following pots have 6mm diameter shafts and 7mm diameter bushings unless otherwise noted.

Resistance	Taper	<u>Description</u>	CAT #	Price each	<u>100</u>
500	Audio	0.45 knurled shaft	NATP-500	5/\$1.00	\$0.15
1K	Linear	0.6" half-moon shaft	NLTP-1K	5/\$1.00	\$0.15
5K	Linear	0.75" half-moon shaft	NLTP-5K	2/\$1.00	\$0.40
5K	Linear	0.32" round shaft. 8mm bushing	NLTP-5K4	2/\$1.00	\$0.40
5K	Audio	0.7" flatted shaft. 8mm bushing.	AP-5K	2/\$1.00	\$0.40
10K	Audio	0.4" knurled shaft. Detents.	NATP-10K	2/\$1.00	\$0.40
10K	Linear	0.35" round shaft. SPST switch	NSLP-10K	2/\$1.00	\$0.40
10K	Linear	0.6" knurled shaft	NLTP-10K	2/\$1.00	\$0.40
10K	Audio	0.5" flatted shaft. 8mm bushing.	AP-10K	2/\$1.00	\$0.40
20K	Linear	0.32" round shaft	NLTP-20K	2/\$1.00	\$0.40
20K	Linear	0.32" flatted shaft. Dual Pot	DLP-20K	2/\$1.00	\$0.40
25K	Linear	0.32" knurled shaft	NLTP-25K	2/\$1.00	\$0.40
25K	Audio	0.35" round shaft	NATP-25K	2/\$1.00	\$0.40
50K	Linear	0.35" knurled shaft	NLTP-50K	3/\$1.00	\$0.25
50K	Linear	0.35" flatted shaft	NTP-50K	2/\$1.00	\$0.40
50K	Linear	0.32" knurled shaft. Dual Pot	DLP-50K	2/\$1.00	\$0.40
100K	Audio	0.32" knurled shaft	NATP-100K	2/\$1.00	\$0.40
100K	Linear	0.35" round shaft	NLTP-100K	2/\$1.00	\$0.40
250K	Linear	0.35" round shaft	NLTP-250K	2/\$1.00	\$0.40
500K	Audio	0.35" round shaft	NATP-500K	2/\$1.00	\$0.40
1M	Audio	0.35" round shaft	NATP-1M	2/\$1.00	\$0.40

SLIDE POTS

				7	—· • •			
Resistance	Taper	<u>Length</u>	Travel	Desc.	CAT #	Price each	<u>100</u>	
1K	Audio	3.5"	2.5"	Dual pot	ASP-1KD	2/\$1.00	\$0.40	
2K	Audio	3.5"	2.75"		ASP-2K	2/\$1.00	\$0.40	
9K	Linear	2"	1.25"	Center detent	LSP-9K	4/\$1.00	\$0.15	
10K	Audio			See below***	ASP-10K	\$1.75	\$1.20	
10K	Linear	1.2"	0.8"	Dual pot	LSP-10KD	3/\$1.00	\$0.25	
10K	Linear	2.38"	2"	Dual pot	LSP-10K	3/\$1.00	\$0.25	
20K	Linear	1.78"	1.35"	Dual pot	LSP-20KD	3/\$1.00	\$0.25	
50K	Linear	2.9"	2"		LSP-50KL	2/\$1.00	\$0.40	
50K	Linear	2.38"	2"		LSP-50K	2/\$1.00	\$0.40	
100K	Linear	2.38"	2"		LSP-100K	3/\$1.00	\$0.25	

*** DUAL 10K AUDIO TAPER SLIDE POT

A/D Electronics # SL1009G A10K. 100 mm travel master slide pot. Low-profile, 8mm high body. Dual 10K audio taper. 5.05" x 0.64." Threaded mounting holes on 4.72" (120mm) centers. PC pins. Lever is 0.32" wide x 0.48" high. Ideal for faders and mixers.

CAT# ASP-10K \$1.75 each • 10 for \$1.50 each • 100 for \$1.20 each

PC MOUNT POTS

6mm diameter shafts, 0.5" long minimum. No Threaded bushing.

Resistance 5K	<u>Taper</u> Linear	Other desc Center detent	CAT # LPB-5K
10K	Linear	Horizontal mount	LPBR-10K
10K	Linear		LPB-10K
10K	Audio		APT-10K
10K	Linear	Center detent	LPC-10K
10K	Linear	Dual pot	NDLP-10K
50K	Linear		LPB-50K
50K	Linear		LPP-50K
50K	Linear	Dual pot	DLPC-50K
100K	Audio	·	APT-100K

All pots above are 4 pcs of one CAT# for \$1.00 100 pcs of one CAT# \$ 15.00 (no mixing)

100K AUDIO TAPER MINIATURE THUMBWHEEL POT W/ SWITCH

Mouser # 31TV501 or equivalent. 16 mm mini-pot with 0.98" dia. black thumbwheel. SPST, on/off switch rated 1 amp @ 12 vdc.



CAT# TTP-100K 5 for \$1.00 • 100 for \$10.00

POTS WITH 1/4" DIA. SHAFT

All of the following pots have 1/4" dia. shafts and 3/8" dia.(3/8-32) threaded bushings. Unless otherwise specified, shafts may be full-round, half-round or knurled.

LINEAR POTS

Values: 15K, 2.5 Meg, 10 Meg. CAT# LTP-xxx 50¢ each (xxx = value)

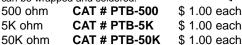
10K AUDIO TAPER POT CAT# ATP-10K 50¢ each

2 MEG AUDIO TAPER

1/4" full round shaft, 3/8" long. **ATP-2MS** 3 for \$1.00 • 100 for \$25.00

BOURNS MODULAR CERMET POTS

Linear taper cermet pot. 0.5" square plastic body. Metal 3/8" bushing and 1/4" dia. x 0.27" long flatted shaft. PC pin-type leads can be wrapped and soldered.



POTS WITH 1/8" DIA. SHAFT

10K LINEAR

Bourns # 51CADE24A15. 0.5" square x 0.35" body. 0.125" dia. x 0.2" long shaft. 1/4-32 threaded bushing. **CAT# LPOT-10KB** \$1.00 each

2.5 MEG LINEAR

Clarostat # CM46945. 0.52" diameter x 0.47" long body. 0.125" diameter x 0.34" long shaft. 1/4-32 threaded bushing. **CAT# LPOT-2.5M** \$1.00 each

AB POTS WITH SWITCH

Series 70 Allen Bradley linear taper modular pots with S.P.D.T. on/off switch. 1/8" dia. x 0.25" long shaft. 1/4" (0.25") threaded bushing. Switch detent operative when pot is fully clockwise. Switch is removable. Two values available.

1K LINEAR CAT # LPS-1K \$1.00 each • 10 for \$8.50 50K LINEAR CAT # LPS-50K \$1.00 each • 10 for \$8.50

2 OHM 50 WATT RHEOSTAT

Ohmite Model J. 2.28" dia. x 1.25".
0.25" dia. shaft. 3/8-32 threaded bushing. These are new rheostats, but the ceramic on some is chipped due to improper storage. They are guaranteed functional. **CAT# RHE-25** \$5.50 each

MOTORIZED POTS

MOTORIZED 10K SLIDE POT

Panasonic # EVANMKP08B14 10K linear taper power fader. 100mm travel. 5 Vdc driving motor. Operates on 2 Vdc to 5 Vdc. 0.2 seconds travel time at 5 Vdc.

Overall dimensions: 7.32" long x 0.6" wide. Motor, 0.95" diameter x 0.72." Threaded mounting holes on 5.27" centers. **CAT # MSP-10K** \$7.00 each 10 for \$6.75 each • 100 for \$6.00 each

DUAL 10K LINEAR TAPER

Alps Electric# 726T-10KBX2. Dual 10K linear pot powered by a small reversible DC gearhead motor. At 6 Vdc the pot varies from 0 to

10K ohms or vice versa in about 8 seconds. Pot and motor assembly are 1" square x 1.7" long excluding shaft & bushing. 6 mm flatted shaft is 0.5" long. 9mm threaded bushing. PC pins and mounting tabs for pc board mounting. Pins can be wrapped and soldered. CAT # MPOT-10K \$4.00 ea. • 10 for \$35.00

DUAL 20K LINEAR TAPER

Shokai # WHE1604A 2 X 20KB Dual 20K linear pot. Powered by a small reversible DC gearhead motor. At 6 Vdc the pot varies from minimum to maximum resistance, or vice versa in about 8 seconds. Pot and motor assembly are approximately

1.7" deep, behind mounting plane. 6mm flatted shaft is 0.7" long. 9 mm threaded bushing. These are new pots, prepped with 2.5" wires and a connector.

CAT# MPOT-20K \$4.00 ea. • 10 for \$35.00

PRECISION MULTI-TURN TRIMMERS

RECTANGULAR TRIMMER

0.75" X 0.19" high. 3/4 watt. Comparable to Bourns 3006P, Beckman 89PR, Weston 830P. 5K, 20K CAT# RTP-xxx \$1.00 each (xxx = resistance)



SINGLE TURN TRIMMERS

VERTICAL THUMBWHEEL

3/16" spacing between outer leads. 1K, 20K, 25K **CAT# VTP-xxx**

(xxx = resistance) 10 of one value \$1.00

5/16" spacing between outer leads. 100, 250, 2K, 4K, 50K, 500K CAT# TPK-xxx 10 of one value \$1.00

SPECIAL !!! 500K trimmer CAT# TPK-500K 200 for \$10.00 (5¢ each)

HORIZONTAL THUMBWHEEL

200, 1K, 50K, 200K, 250K, **CAT# HTP-xxx** 10 of one value \$1.00 (xxx = resistance)



SIDE ADJUST 3/8" square X 3/16" thick. 1K, 5K, 50K,

CAT# TTP-xxx 2 for \$1.00

TOP ADJUST

3/8" square X 3/16" high. 1/2 watt. Comparable to Bourns 3386P, Beckman 72PR and Spectrol 63P. 100, 500, 2K, 50K

CAT# STP-xxx 2 for \$1.00

500K OHM TOP ADJUST CAT # TP-500K

4 for \$ 1.00

KNOBS

FITS 6mm Full Round Shaft

0.63" DIAMETER SKIRTED KNOBS

For pots with 6 mm diameter shaft. 0.6" high tapered knob with 0.63" dia. skirt. Raised grey or yellow pointer lines:

KNOB FOR 6 MM SHAFT

Daka-ware # 27. Black fluted knob with white pointer line on skirt. 1.13" skirt diameter. Knob is 0.84" diameter x 0.65" high. Press-on to 6mm dia. shafts. CAT # KNB-107 75¢ each

10 for \$ 6.50 • 100 for \$ 50.00

SKIRTED POINTER KNOB

Black fluted knob with 0.79" skirt, 0.67" high. Brushed aluminum face. White pointer line on one side. Brass insert with set screw.

CAT # KNB-118 85¢ each 10 for 70¢ each 100 for 60¢ each





For pots with 6 mm diameter shaft. 0.92" diameter x 0.85" high, black plastic serrated knob. Face is black with white pointer line and chrome circumference.

CAT# KNB-10 2 for \$ 1.00

KNOB FOR 1/4" FLATTED SHAFT

White plastic knob with serrated rim. 1.25" diameter x 0.6" high. Fits flatted 1/4" dia. shaft.

CAT # KNB-110 2 for \$1.00



KNOBS FOR 6MM HALF-MOON SHAFT

1" diameter, skirted black phenolic knob with white pointer line and dot on skirt. 0.6" high. Press-on to 6mm and 1/4" diameter half-moon shafts.



CAT # KNB-109 2 for \$ 1.00 100 for \$ 30.00 10 for \$ 4.00

0.5" diameter x 0.57" high fluted black plastic knob. Skirt is 0.6" diameter and has a 2mm notch corresponding to the white pointer line at the top of the knob.



CAT# KNB-34 3 for \$1.00 • 100 for \$25.00

MOUNTING BRACKETS

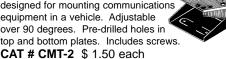
GOOSENECK MOUNTING BRACKET (USED)

Versatile 10" long metal gooseneck bracket. Ideal for automotive audio or communications equipment. Matte black color. Bottom mounting plate is 2.6" diameter with four mounting holes. Top plate is 2" x 2.5" and has multiple holes to accommodate various mounting configurations. Top and bottom plates unscrew for convenient attachment. Removed from automotive application in good condition. May have minor scratches. CAT# FMB-10 \$5.00 each



"CLAM SHELL" MOUNTING BRACKET

A heavy-gauge steel bracket designed for mounting communications equipment in a vehicle. Adjustable over 90 degrees. Pre-drilled holes in top and bottom plates. Includes screws.



TILT AND SWIVEL BRACKET

Heavy plastic mounting bracket ideal for mobile communications or audio accessories. Top and bottom mounting plates are 1.97" x 1.65" with holes in the corners on 1.2" x 1.5" centers. 2" overall height. Wide range of tilt and swivel settings. CAT# AMB-4 \$3.25 each



SPRING-RETURN CABLE REEL

Spring-driven reel keeps a constant tension on plastic coated steel cable. The cable is terminated with a metal eyelet, and its extended length is 32". The pull of the unit is approximately 1 3/4 lbs. The reel is housed in a sturdy plastic case that is open on the back side and is intended for mounting on a flat surface. Overall dimensions are 2.38" x 2" x 0.7" thick. Two mounting holes on 2.4" centers. Removed from equipment.

CAT # RL-1 \$ 3.50 each

SPRINGS



COMP = compression spring EXT = extension spring.

Length: coil length/overall length with loops

Dia. 0.2"	Length 0.3"/0.7"	Type EXT	CAT # SPR-5	Price 10 for \$1.00	100 \$6.00
0.48"	1.25"	COM	SPR-4	5 for \$1.00	\$10.00
0.4"	3.72"/4.45"	EXT	SPR-3	4 for \$1.00	\$15.00
0.37"	3.64"/5.4"	EXT	SPR-2	4 for \$1.00	\$15.00
0.35"	4"/6"	EXT	SPR-6	4 for \$1.00	\$15.00

WEBBED NYLON STRAP

WITH BUCKLE

12" X 3/4" wide black webbed nylon strap with plastic,

self-clinching buckle. Ideal for bundling wires, fishing poles or skis. Great for fastening anything where quick-lock and quick release is desireable. Takes the place of Velcro[™] straps in many applications. **CAT # WS-2** 75¢ each • 20 for \$ 10.00

2" WEBBED NYLON STRAP & BUCKLE



Heavy-duty 2" wide black nylon webbed straps (2 pcs), and nylon buckle. Buckle is designed for quick fasten, release and easy adjustment of strap length. Both straps are 23" long with hem on one end. Great for quick, easy load fastening.

CAT# WS-3 \$1.75 each • 10 for \$15.00

CABINET LOCK

Two position lock with two "Ace" style keys. Key removable in both positions. Fits 0.75" dia. holes, flatted on one side. Fastens with spring-clip. Fits doors up to 1/8" thick. 0.85" diameter chrome bezel.

CAT # CL-4 \$1.50 each • 10 for \$ 12.50

VELCRO™

"WRAPPERS"REUSABLE **VELCRO CABLE TIES**

12.5" long x 0.5" wide "Velcro"(tm) strap ideal for bundling wire or for strapping together fishing poles, skis and other items. CAT # WR-1 \$1.00 each • 10 for \$8.50

1.2" WIDE VELCRO STRIPS

- 1 8" loop strip, nylon backed
- 1 1" loop strip, adhesive backed
- 3 hook strips, adhesive backed, 4", 2.35", 2.35" CAT # VCO-5 85¢ each • 10 for 75¢ each



1.25" diameter x 1" high. Shiny black finish with knurled circumference. Some scuffs and blemishes, removed from equipment. Brass insert tapped for 12-24 screw.



CAT# KNB-106 4 for \$1.00 • 100 for \$15.00

BOBBIN

Ho Sung International. EI-2820 nylon bobbin. Core is 10 mm x 13 mm x 10 mm high. Top is 18.5 mm x 21.5 mm. Base is 22 mm x 26 mm. Four leads, 15 mm and 20 mm spacing. **CAT# BN-1** 10 for \$1.00 • 250 pieces 7¢ each 1000 pieces (5¢ ea.) • 5000 pieces 4¢ each

RUBBER FEET / BUMPERS

ADHESIVE BACKED

Remove from strip and push onto

chassis or whatever. SIZE: 7/16" dia. X 1/4".

CAT# RF-716 8 rubber feet \$1.00 40 rubber feet \$4.00

0.75" DIAMETER

0.75" dia. x 0.28" high black rubber foot. 0.36" dia. recessed hole accepts up to #8 screw. CAT # RF-16 20¢ each • 100 for \$ 15.00

JUMBO RUBBER FEET

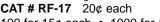
Good quality, high-density gray rubber feet with adhesive backing. Designed to support a computer monitor. 1.14" square top. 0.75" square at base. 0.88" high.



CAT# RF-10 4 for \$1.00 • 100 for 20¢ each

PHENOLIC CABINET FEET

Sturdy phenolic cabinet feet. Dark brown color. 0.87" high. 0.88" diameter at top. Tapers to 0.78" diameter at base. Recessed mounting hole for #10 screw.



100 for 15¢ each • 1000 for 10¢ each

4.6" DIAMETER WHEEL

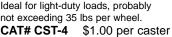
A fairly rugged, light-duty wheel, similar to those found on baby strollers. 4.6" dia. x 1" wide. White rubber tire mounted on a dark blue unbreakable plastic rim. 0.25" bore.

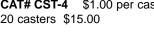
CAT # WH-10 \$1.50 each

CASTERS

LIGHT-DUTY SWIVEL CASTER

1.25" diameter x 0.53" wide wheel on a ball bearing swivel. Ideal for light-duty loads, probably not exceeding 35 lbs per wheel.





DUAL SWIVEL CASTERS

Light-duty, dual swivel casters. 1.53" diameter wheels. 1.96" x 1.19" metal mounting plate. CAT # CST-5 \$1.00 each 10 for \$7.50 100 for \$60.00



COPPER STRIP

0.937" wide x 0.0162" thick solid copper strip for shielding, protection or decorative applications. **CAT# CT-8** 75¢ per foot • 10' for 65¢ per ft.

GAS SPRING



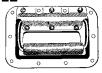
Heavy-duty spring damper used to aid the opening and closing of doors and hatches. 6.75" extended, 5" compressed. Requires about 60 lbs. of pressure to compress. 0.7" diameter canister. Mounting ends are 0.14" thick and accept 0.25" screw or pin.

CAT# GS-3 \$1.50 each 10 for \$12.50 • 100 for \$100.00

RACK & CABINET HANDLES

RECESSED FLIP HANDLE

Heavy-duty black steel "flip" handle. Spring-loaded handle remains flat when not in use. 6.37" x 4.25." Recessed 0.25". CAT # HDL-16 \$3.50 each



STEEL CABINET HANDLE

Heavy-duty black steel recessed handle for PA cabinets and other large cabinets and equipment. 8.63" x 6.32" x 2.28" deep.

CAT # HDL-17 \$4.50 each



1.7" HANDLE

0.75" high. 0.187" diameter aluminum stock. Threaded for 4-40 screws on 1.5" centers. **CAT # HDL-25** 50¢ each

2.2" HANDLE

0.87" high. 0.187" diameter aluminum stock. Threaded for 4-40 screws on 2" centers CAT # HDL-12 50¢ each

2.5" RACK HANDLE

1.15" high. 0.31" dia. brass handle with shiny nickel plated finish. Threaded for 8-32 screws on 2.50" centers. CAT# HDL-23 \$1.00 each



3.2" HANDLE

0.75" high. 0.187" diameter steel stock. Shiny dark gunmetal enamel finish. Threaded for 4-40 screws on 3" centers. CAT # HDL-13 \$1.00 each

3.2" HANDLE

0.985" high. 0.187" diameter aluminum handle.



Threaded for 4-40 screws on 3" centers. CAT # HDL-27 \$ 1.25 each

4" HANDLE

4.10" X 1.20" high shiny nickel-plated brass rack handle. Threaded for 8-32 screws on 3.75" centers. CAT# HDL-24 \$1.25 each



4.29" RACK HANDLE

HH Smith # 1624. 1.5" high. 0.25" round, chrome plated brass handle. 8-32 mounting holes on 4" centers.

CAT# HDL-26 \$1.25 each



STEEL CABINET CORNER

Heavy-duty black steel corner. Protects and supports cabinets and equipment. Three hole mounting.

CAT # COR-303

65¢ each



CAPACITORS

RADIAL ELECTROLYTIC

Greatly reduced prices on most radial electrolytic capacitors

UF .22 .47 1 2.2 3.3 4.7 10	Volts 50 50 50 50 50 50 50	1+ .10 .15 .15 .15 .12 .10	10+ .06 .13 .10 .10 .08 .08	100+ .04 .10 .06 .06 .05 .05
10 10 22 22	35 50 25 50	.10 .12 .16 .10	.08 .10 .14 .08	.05 .06 .11 .05
33 33 47 47 47	25 50 10 16 35	.18 .22 .08 .15	.14 .20 .04 .10	.10 .18 .035 .07 .13
47 100 100 100 220	50 16 25 50 10	.10 .15 .20 .30	.08 .12 .18 .25	.05 .09 .15 .20
220 220 220 330 470	35 50 100 50 16	.25 .25 .75 .28 .33	.22 .14 .65 .23	.21 .12 .45 .15
470 470 600 1000 1000	25 50 50 16 25	.30 .45 .30 .40	.25 .40 .25 .30	.15 .18 .20 .25 .30
1000 1000 1500 2200 2200	35 50 10 10	.48 .80 .40 .20	.45 .70 .35 .15 .55	.40 .25 .20 .08 .45
2200 3300 3300 3300 4700	50 16 25 50 25	1.25 .75 1.00 1.50 1.25	1.00 .65 .80 1.20 1.10	.85 .45 .70 1.00 .95

100 VOLT NON-POLARIZED CAPS

	- C		
MFD	CAT#	1-9	10+
1	NC-1	.50	.45
2.2	NC-2.2	.50	.45
3.3	NC-3.3	.50	.45
4.7	NC-4.7	.60	.50
6	NC-6	.65	.55
8	NC-8	.65	.55
12	NC-12	.80	.70
22	NC-22	.85	.75
33	NC-33	.90	.75
47	NC-47	1.30	1.10
50	NC-50	1.35	1.15
65	NC-65	1.70	1.50
80	NC-80	1.80	1.55
100	NC-100	1.80	1.55
125	NC-125	2.15	1.90
150	NC-150	2.50	2.20

HIGH VOLTAGE CAPS

22 UF 450 VDC



0.63" diameter X 1.6" long axial electrolytic capacitor.

CAT# 22/450VA \$1.25 each 10 for \$10.00 • 100 for \$80.00

33 UF 400 VDC

0.64" dia.x 1.05" long radial electrolytic.



CAT # 33/400VR \$ 1.15 ea. 10 for \$ 9.50 • 100 for \$ 85.00

47 UF @ 200 VDC



105° C 0.52" dia. x 1" long radial electrolytic. 0.2" lead spacing. CAT# 47/200VR 2 for 90¢ 100 for \$ 30.00 • 1000 for \$ 150.00

180 UF 400 VDC



Nichicon VZ(M). 105° C. 0.8" dia. x 1.63" long radial electrolytic. 0.4" lead spacing. CAT# 180/400VR \$ 2.00 each 10 for \$ 1.75 each 100 for \$ 1.50 each

AXIAL SPECIALS

100 uf @ 16 Vdc Axial Cut and Bent leads 1" lead spacing., 0.32" dia. X 0.63"

CAT# 100/16VAS 100-499 9¢ ea. 500-999 7¢ ea. 1.000 + 5¢ each

3.3 UF @ 50 VDC AXIAL



0.2" diameter x 0.5" long. CAT # 3.3/50VA

5 for 50¢ • 100 for \$ 5.00 500 for \$15.00 •1000 for \$20.00

PHOTOFLASH CAPS

150 UF, 360 VOLT

Samwha # FDA 0.59" diameter x 1.59" long.

75¢ each

CAT # PPC-1536



200 UF, 360 VOLT

Rubycon# CE0. 0.64" diameter x 1.8" long. CAT # PPC-2036 \$1.25 ea.

410 UF, 300 VOLT

Rubycon # 1A2304A. 0.7" dia. X 1.7" long. Right angle PC or solder leads on 0.25" centers.

CAT# PPC-410 \$2.00 each 10 / \$18.50 • 200 / \$320.00

RADIAL SPECIAL

470 UF 50 VOLT RADIAL

CAT# 470/50VR _

100 for 18¢ each 1000 for 15¢ each

1000 UF 100 VOLT

0.72" dia. x 1.61." Radial leads on 0.3" centers.

CAT # 1000/100VR

\$1.00 each 10 for 85¢ each 100 for 65¢ each

SNAP-IN CAPACITORS

39 UF 400 VDC

Nichicon CEGJ 105º C.

0.875" diameter x 0.643" high. 0.4" pin spacing.

CAT # EC-3940 85¢ each

180 UF 400 VDC

Nippon Chemi-Con SMM. 85° C. 1.19" diameter x 1.03" high. 0.4" pin spacing. CAT # EC-1840 \$ 2.00 ea.

330 UF 400 Vdc

BHC Aerovox # ALC10D1001DF -10 +30%. 1.4" diameter x 2" high. 0.4" pin spacing. CAT # EC-3341

330 UF 450 VDC

\$2.50 each

Nichicon, 85° C 1.18" dia. x 2.03" high. CAT # EC-3345 \$2.75 each

560 UF 400 Vdc

NICHICON CE 85° C LQ (M) 1.39" diameter X 1.83"h. 0.4" lead spacing.

CAT# EC-5640 \$4.00 each 10 for \$3.75 each 100 for \$3.00 each

1000 UF 200 VDC

Nippon Chemi-con SMH. 85° C. 1.19" dia. x 1.61" high. 0.4" lead spacing. CAT # EC-1020 \$2.00 each

1800 UF 200 Vdc

Marcom # DUF-M. 105° C. 1.4" dia. x 2" high. 0.4" pin spacing.

CAT # EC-1820

\$3.25 each

3300 UF 50 Vdc

Nippon Chemicon SME 85° C. 1.2" dia. X 1.03" h. CAT# EC-3500 \$1.00 each

6800 UF 25 Vdc

TSNH CE. 1" dia. X 1.59" high. 105° C

CAT# EC-6825 \$1.25 each

10,000 UF 16 Vdc

TSNH CE. 1" dia. X 1.59" high. 105° C

CAT# EC-1016 \$1.50 each

680 UF 40 VDC CAPACITOR SWITCHING **POWER GRADE**

Cornell Dubilier #300681M040JE8 Long life, ultra-low ESR capacitor designed for switching power supplies and UPS battery stiffening applications. 20% tolerance. 105° C. 1" diameter x 1.23" high. Three leads for stability and reverse-proof mounting. CAT # EC-684 65¢ each 100 for 40¢ each

1 FARAD 2.5 VOLT AERO-**GEL SUPERCAPACITOR**

PowerStor (tm) # B0810-2R5105 In addition to battery back-up applications, these capacitors can be used to provide short, high-current pulses for electronic and electromechanical applications.

Features include: Extremely low ESR. Ultra low leakage current - can hold a charge for several weeks. Very high charge-discharge cycle life. High usable capacity - high energy that can be discharge quickly.

0.33" diameter x 0.47" high. 0.16" (4mm) cut & bent pc leads. CAT # CBC-125 \$1.00 each 10 for 85¢ each • 100 for 70¢ each

1 FARAD 5.5 VOLT **MEMORY BACK-UP CAPACITORS**

Super high capacitance capacitors, excellent for memory back-up in CMOS type RAM. Two styles:

0.8" dia. x 0.29" high. PC leads on 0.2" centers.

CAT # CBC-11 \$ 3.75 each

10 for \$ 3.50 each 100 for \$ 3.00 each

Vertical Mount. 0.18" thick x 0.74" diameter. PC leads on 0.2" centers. CAT# CBC-12 \$3.75 each • 10 for \$3.50 each 100 for \$ 3.00 each

Special Pricing - Monolithic Ceramic Capacitors

CAPACITORS LISTED BELOW MAY HAVE LONG LEADS OR PC CUT LEADS. WE CANNOT GUARANTEE LONG LEADS. CUT LEADS ARE ADEQUATE FOR PC BOARD INSERTION OR BREADBOARDING.

ALL ARE 50 VOLTS OR MORE

RADIAL MONOLITHICS

220 pf CAT # RM-221 680 pf **CAT # RM-681** 1000 pf **CAT # RM-102** 0.01 uf **CAT # RM-103** 0.022 uf CAT # RM-223

AXIAL MONOLITHICS

18 pf **CAT # AM-180** 680 pf CAT # AM-681 4700 pf CAT # AM-472 1000 pf **CAT # AM-102**

Any of the above - single value, no mixing for quantity pricing. 20 for \$1.00 • 100 for \$4.00 500 for \$15.00 • 1000 for \$20.00

0.1 mfd 25 Volt Axial Monolithic

0.15" dia. X 0.39" long. CAT# MCB-104

10 for \$1.00 • 100 for \$7.00

CERAMIC DISC CAPS

25 VOLT **CERAMIC DISC**



0.1 UFD CAT# DC-104 10 for \$1.00 100 for \$8.00 • 1000 for \$35.00

50 VOLT CERAMIC

DISC When ordering use CAT# DISC Followed by value desired. Prices for disc caps (except 0.1 mfd) are:

10 PCS. ONE VALUE 60¢ 100 PCS. ONE VALUE \$5.00 1000 PCS. ONE VALUE \$35.00

15pf 47pf 100pf 150pf 220pf 270pf 300pf 330pf 470pf 560 pf 820pf 3300pf .001 .0018 .002 .0047 .005 .0015 015 047

.1 MFD 50 VOLT DISC

CAT# DISC.1 10 for \$1.00 100 for \$8.00 • 1000 for \$65.00

1.000 VOLT CERAMIC DISC

When ordering use CAT# HVDC followed by value desired. Prices for 1000 volt disc capacitors (except .01) are: 10 Pieces of ONE VALUÉ \$1.00

10pf 15pf 100pf 200pf 220pf 680pf .01 uf 5 for \$1.00

5pf 3KVdc CAT# HVD-5

10 for \$1.00 100 for \$8.00

.001 UF 10 KV AXIAL CERAMIC (MG DISC CAPACITOR

Matsushita # ECK-D4A102MDA 0.78" diameter x 0.25" thick CAT # HVD-102 \$1.00 ea. 10 for \$8.50 • 100 for \$70.00

MOTOR STARTER/ RUN CAPACITORS

2 UF 400 VAC

AEG Telefunken METALIZED PAPER # AB MP 2/400 Aluminum case with screw and nut on top. 1" dia. x 2.93" high. 0.25" qc or solder terminals.

CAT# MPC-240 2 for \$1.00

TRIMMER CAPACITORS

0 – 3 PF TRIM CAP

CTC-05RA PC leads on 0.2" centers.

CAT# VCAP-16 2 for \$1.00

2 - 18 PF

0.25" square x 0.35" high. PC leads on 0.2" centers.

CAT # VCAP-18 2 for \$1.00 100 for \$40.00 (40¢ each) 700 for \$210.00 (30¢ each)

5 - 65 PF PC MOUNT

0.38" diameter x 0.42". Three pc leads.

CAT # VCAP-15

\$1.00 each

10-62 pf Screw adjust.

1" X 0.47"

CAT# VCAP-12

\$1.25 each

METALIZED POLYPROPYLENE CAPACITORS

<u>5 UF – 280 VAC</u>

ASC# BP103 1.2" X 0.85" X 1.75" long. CAT # MKP-500 \$1.50 each

<u> 7 UF - 250 VAC</u>

Aerovox # W43B2507E 1.05" diameter x 1.91" long. **CAT # MKP-700** \$2.00 each

<u>10 uf - 175 VAC</u>

Aerovox Type ARPM 0.94" diameter x 1.74" long. CAT# MKP-1001

\$2.50 each

100 VOLT POLYESTER

-	(F	RADI	AL)		
MFD	CAT#	1+	10+	100+	1000+
.001	RMC-102	.10	.08	.06	.05
.0015	RMC-152	.10	.08	.06	.05
.0047	RMC-472	.10	.08	.06	.05
.01	RMC-103	.12	.09	.07	.06
.022	RMC-223	.12	.09	.07	.06
.027	RMC-273	.15	.11	.08	.07
.047	RMC-473	.15	.11	.08	.07
.068	RMC-683	.17	.12	.09	.08
.082	RMC-823	.17	.12	.09	.08
.1	RMC-104	.17	.12	.09	.08
.15	RMC-154	.20	.13	.10	.09
.22	RMC-224	.25	.19	.17	.15
.47	RMC-474	.40	.32	.29	.25

MYLAR CAPACITORS

(AXIAL	STYL	E) _		
MFD	VOLT	TOL	CAT#	PRICE
.0015	100	20%	AMC-3	4 for \$1.00
.0022	100	10%	AMC-5	4 for \$1.00
.0047	200	20%	AMC-8	4 for \$1.00
.0068	200		AMC-10	4 for \$1.00
.022	100	1%	AMC-17	4 for \$1.00
.033	100		AMC-77	4 for \$1.00
.033	200		AMC-19	3 for \$1.00
.047	100	10%	AMC-20	4 for \$1.00
.04	100		AMC-191	4 for \$1.00
.056	100	3%	AMC-22	4 for \$1.00
.082	100	5%	AMC-25	4 for \$1.00
.1	100	10%	AMC-27	3 for \$1.00
.18	160	10%	AMC-49	3 for \$1.00
.22	50	5%	AMC-33	4 for \$1.00
.22	100	5%	AMC-71	3 for \$1.00
.47	200	10%	AMC-38	3 for \$1.00
.56	800		AMC-568	\$1.00
.65	200	5%	AMC-42	3 for \$1.00
.68	50	5%	AMC-72	3 for \$1.00
.68	100	10%	AMC-43	3 for \$1.00
1.33MF.	250		AMC-46	2 for \$1.00

RADIAL MYLAR

NEW LOWER PRICING ON MOST RADIAL MYLARS!

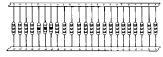
MFD	VOLT	CAT#	PRICE
68pf	50	RMC-1	7/\$1.00
.0043	1500	RMC-43	5/\$1.00
.022	630	RMC-51	5/\$1.00
.0299	50	RMC-315	6/\$1.00
.039	50	RMC-100	6/\$1.00
.082	400	RMC-30	6/\$1.00
.2	50	RMC-19	6/\$1.00
.47	250	RMC-85	6/\$1.00
.47	400	RMC-50	4/\$1.00
.82	150	RMC-82	4/\$1.00

	()			
Value MFD	Voltage VDC	CAT#	PRICE	
0.1	35	DT-1	4 for \$	1.00
1	35	DT-25	3 for \$	1.00
3.3	10	DT-35	5 for \$	1.00
3.3	25	DT-3325	3 for \$	1.00
15	25	DT-1525	2 for \$	1.00
22	16	DT-2216	2 for \$	1.00
22	25	DT-2225	2 for \$	1.50
33	16	DT-3316	2 for \$	1.35
47	16	DT-4716	2 for \$	1.35
47	25	DT-4725	2 for \$	1.75

2 UF, 200 VOLT METALIZED POLYESTER

TRW # M446.
1.1" lead spacing.
0.4" long leads.
Body size: 1.27" x
0.54" x 0.4". Large quantity available.
CAT # RMC-220
10 for \$1.50
100 for \$10.00
500 for \$40.00
1000 for \$70.00
5000 for \$250.00

500 PIECE 1/4 WATT RESISTOR ASSORTMENT



4.7 ohms to 10 Meg ohm, 5% resistors. 54 of the most popular values. 20 pieces each of the most popular values, 1K, 2.2K, 4.7K, 10K, 22K, 4.7K, 100K. 5, 10 or 15 pieces of other values depending on popularity. **CAT # RES-54**

\$ 8.95 per 500 pc assortment

1/4 & 1/2 WATT RESISTORS 5% CARBON FILM

1/4 WATT		_		6 10		
RESISTORS	1.0	20	300	3.9 K	51 K	680 K
Minimum order is	1.5	24	330	4.3 K	56 K	750 K
10 PIECES OF	1.8	27	360	4.7 K	62 K	820 K
	2.0	30	390	5.1 K	68 K	910 K
ONE VALUE.	2.2	33	430	5.6 K	75 K	1.0M
10 PIECES of ONE VALUE 50¢	2.4	36	470	6.2 K	82 K	1.1 M
	2.7	39	510	6.8 K	91 K	1.2 M
100 PIECES of ONE VALUE \$3.00	3.0	43	560	7.5 K	100 K	1.3 M
	3.3	47	620	8.2 K	110 K	1.5 M
200 PIECES of ONE VALUE \$4.00	3.6	51	680	9.1 K	120 K	1.6 M
	3.9	56	750	10 K	130 K	1.8 M
1,000 PIECES of ONE VALUE \$10.00	4.3	62	820	11 K	150 K	2.0 M
	4.7	68	910	12 K	160 K	2.2 M
1/2 WATT	5.1	75	1.0 K	13 K	180 K	2.4 M
	5.6	82	1.1 K	15 K	200 K	2.7 M
RESISTORS	6.2	91	1.2 K	16 K	220 K	3.0 M
Minimum order is	6.8	100	1.3 K	18 K	240 K	3.3 M
10 PIECES OF	7.5	110	1.5 K	20 K	270 K	4.7 M
ONE VALUE.	8.2	120	1.6 K	22 K	300 K	5.1 M
10 PIECES of ONE	9.1	130	1.8 K	24 K	330 K	5.6 M
VALUE 50¢	10	150	2.0 K	27 K	360 K	6.2 M
100 PIECES of ONE	11	160	2.2 K	30 K	390 K	6.8 M
VALUE \$3.50	12	180	2.4 K	33 K	430 K	7.5 M
200 PIECES of ONE	13	200	2.7 K	36 K	470 K	8.2 M
VALUE \$4.50	15	220	3.0 K	39 K	510 K	9.1 M
1,000 PIECES of ONE	16	240	3.3 K	43 K	560 K	10 M
VALUE \$12.00	18	270	3.6 K	47 K	620 K	

POWER RESISTORS

POWER	<u>ohms</u>	watts	<u>style</u>	<u>ohms</u>	watts	<u>style</u>
RESISTOR	.05	5	sand	l ²	5	axial
	.1	10	axial	2	10	axial
PRICING	.1	10	sand	2.5	50	sand
1 - 5 watts	.12	7	axial	7.5	5	sand
3 for \$1.00	.2	5	sand	10	100	ceramic
6 - 10 watts	.22	3	sand	12	3	sand
2 for \$1.00	.47	2	sand	20	7	sand
·	.47	5	sand	30	5	axial
11 - 25 watts	.5	3	axial	35	10	ceramic
\$1.00 each	.5	4	axial	40	10	sand
50 watts	.5	5	axial	60	5	sand
\$2.00 each	.51	5	axial	80	10	ceramic
100 watts	.75	5	axial	82	5	sand
\$3.00 each	.75	5	sand	165	5	sand
	.75	10	sand	180	5	sand
a la	1	5	sand	200	5	axial
	1.2	4	axial	220	3	axial
flat ceramic	1.3	5	axial	240	5	sand
a a	1.5	2	axial	300	5	sand
	1.5	5	sand	390	7	sand
	1.8	2	sand	680	3	axial
ceramic				2.7K	5	sand
axial					—	
				cond		
axiai				sand		

SPEAKERS

3/4" 30 OHM SPEAKER

3/4" speaker with polypropylene cone.
Cone is covered with a metal plate with four holes. Prepped for use in cell phones with foam gasket on perimeter of face and double-side sticky tape on back. 30 ohm coil. 1" pigtail leads.
CAT # SK-17 75¢ each • 100 for \$ 50.00

CAT # SK-17 75¢ each • 100 for \$ 50.00 1000 for \$ 350.00

1" SPEAKER WITH POLYPROPYLENE CONE

8 ohm, 0.1 watt speaker with clear polypropylene cone. Only 0.15" thick. Good sound quality for its size. Large quantity available. **CAT # SK-218** \$1.00 each • 10 for \$8.50 100 for \$70.00 • 1000 for \$500.00

1" ENCASED SPEAKER

Hakuto # HSM30A-81. 8 ohm,
0.15 Watt speaker in black plastic
enclosure. Frequency response 600-5000 Hz.
1.16" diameter x 0.47" high. PC leads on 0.6" centers. In addition to protecting the speaker, the enclosure enhances the speaker's resonance.
Large quantity available.

CAT # SK-94 \$ 1.25 each 10 for \$ 1.10 each 100 for 85¢ each

1 3/16" (30 mm) SPEAKER

M&G # AZ-30S Very thin 8 ohm, 0.4 watt speaker. 1.19" square x 0.21" thick.

CAT# SK-14 \$1.00 each • 100 for \$70.00

1.5" 8 OHM SPEAKER

ICC # \$150-RMF. Low-profile 8 ohm speaker. 1.5" clear poly cone. 1.57" dia. x 0.37" thick overall. **CAT # SK-158** \$1.25 each

2" 8 OHM SPEAKER

Mouser # 25SP003. 2" square frame x 0.75" depth. 8 ohm coil. 0.2 watt. Alnico magnet. Prepped with 7" leads.

CAT # SK-96 \$ 1.50 each

2 1/4" SPEAKER, 8 OHM CAT# SK-214

\$1.25 each

THIN 2.25" SPEAKER, 8 OHM

Thin 2.25" 8 ohm 0.2 Watt speaker. Prepped with 6" leads with 2 pin socket connector (0.1" spacing). 0.37" overall thickness.

CAT # SK-97 \$ 1.00 each 10 for 80¢ each • 100 for 60¢ each

2 1/4" SPEAKER, 32 OHM

0.38" thick. **CAT# SK-232** 75¢ each • 100 for 55¢ each 1000 for 25¢ each

2 1/2" 4 OHM

2 1/2" cone, 0.5 watt 4 ohm imp. 7 1/2" leads. **CAT# SK-254** 75¢ each 100 for \$55.00 Case of 360 - \$162.00 (45¢ each)



2 1/2" 8 OHM

Panasonic# EAS65P76A3
8 ohm 0.4 watt speaker
with soft-edge paper cone for
improved sound quality. 0.93" overall
depth. 2.25" wire leads with 2 prong

(0.1" spacing) socket connector. Large quantity available. **CAT # SK-255** \$1.00 each 10 for \$6.00 • 100 for \$40.00

SHIELDED 2.75" FULL RANGE SPEAKER

Made for Bose for use in one of their systems.

2.75" full range speaker.

Shielded magnet. Crisp, clean output. Ideal for surround sound applications. 8 ohm 8 oz speaker. 2.75" square x 1.65" deep. Mounting holes on 2.15" centers.

1.5" X 3.5" OVAL SPEAKER

12 ohm 6 watt speaker with shielded magnet.
1.8" overall thickness.
Mounting holes on
4.4" centers. New speaker,

CAT # SK-95 \$6.95 each

4.4" centers. New speaker, but the gasket on the mounting surface is imperfect.

CAT# SK-89 \$1.00 each

3" 8 OHM SPEAKER

8 Ohm, 3.5 Watt full range speaker. Paper cone with a flexible edge for low range response. Metallized dome for improved highs. 1.75" dia. magnet. CAT # SK-92 \$1.50 each



MID RANGE SPEAKERS

5.25" 50 WATT MIDRANGE SPEAKER

5.25" dia. closed back midrange speaker. 8 ohms. 0.75" voice coil. 10 oz magnet. Rolled foam edge. 50 Watts RMS. 550 - 15 KHz. 92 dB @ 1W/ 1m.

CAT# GM-658 \$5.50 each



5.25" 60 WATT MIDRANGE SPEAKER

5.25" dia. closed back midrange speaker. 8 ohms. 1" voice coil. 12 oz magnet. Poly-mica cone with rolled foam edge. 60 Watts RMS. 500 - 15 KHz. 96 dB @ 1W/ 1m.

CAT# GM-858 \$6.95 each



WOOFERS

4" 40W SHIELDED WOOFER, 8 OHM

8 ohm impedance. Rolled foam edge with poly laminated cone. Shielded for use with computers or video. 11 oz magnet. 1" voice coil. 40 Watts / 70 Watts max. 70 - 10 KHz frequency response. 83 dB @ 1W/ 1m.

CAT# GW-2048 \$7.50 each



PEERLESS 5" SPEAKER

High-quality 5" 4 ohm full range speaker made by Peerless Speaker Company of Denmark. Clear, crisp sound reproduction. Features a polymer cone with rolled rubber edge surround, 1" voice coil and a cloth spider. Dual field-canceling magnets for use with video equipment. No specs available - approximately 50W power. Outer dimensions: 5" x 5" x 2.75" deep.

CAT # SK-405 \$12.00 each

5.25" 70W SHIELDED **WOOFER, 8 OHM**

8 ohm impedance. Rolled foam edge with poly laminated cone. Shielded for use with computers or video. 16 oz magnet. 1" voice coil. 70 Watts / 130 Watts max. 62 - 9 KHz frequency response. 84 dB @ 1W/ 1m. CAT# GW-2058 \$8.50 each

6.5" 90 WATT WOOFER, 8 OHM

Poly-mica cone with rolled rubber edge. 20 oz magnet. 1.5" diameter hi-temp voice coil. 90 Watts / 170 Watts max. 41 -8 Khz frequency resopnse. 85 dB @ 1W/1m.

CAT # GW-6028 \$ 16.50 each

6.5" 90 WATT WOOFER, 8 OHM

Polymer laminated cone with rolled foam edge. 20 oz magnet. 1.5" diameter voice coil. 90 Watts / 180 Watts max. 56 – 8 Khz frequency response. 88 dB @ 1W/ 1m.

CAT # GW-2068 \$ 11.95 each

8" 100W WOOFER, 8 OHM

8 ohm impedance. Rolled foam edge with poly laminated cone. 20 oz magnet with vent and bumper plate. 1.5" voice coil. 100 Watts / 200 Watts max. 45 -6 KHz freq. response. 87 dB @ 1W/ 1m. CAT# GW-2088 \$12.95 each

8" 100W WOOFER, 8 OHM

8 ohm impedance. Rolled rubber edge with poly-mica cone. 20 oz magnet with vent and bumper plate. 1.5" voice coil. 100 Watts / 190 Watts max. 35 - 8 KHz freq. response. 84 dB @ 1W/ 1m.

CAT# GW-8028 \$17.50 each

10" 110W WOOFER, 8 OHM

8 ohm impedance. Rolled foam edge with poly-laminated cone. 20 oz magnet with vent and bumper plate. 1.5" voice coil. 110 Watts / 220 Watts max. 40 - 5 KHz freq. response. 90 dB @ 1W/ 1m.

CAT# GW-2108 \$15.95 each

10" 130W WOOFER, 8 OHM

8 ohm impedance. Rolled rubber edge with poly-mica cone. 30 oz magnet with vent and bumper plate. 1.5" voice coil. 130 Watts / 250 Watts max. 29 - 7 KHz freq. response. 86 dB @ 1W/ 1m.

CAT# GW-1038

\$31.75 each

12" 120W WOOFER, 8 OHM

8 ohm impedance. Rolled foam edge with poly laminated cone. 20 oz magnet with vent and bumper plate. 1.5" voice coil. 120 Watts / 240 Watts max. 34 - 2 KHz freq. response. 88 dB @ 1W/ 1m.

CAT# GW-2128 \$18.95 each

12" 150W WOOFER, 8 OHM

8 ohm impedance. Rolled rubber edge with poly-mica cone. 40 oz magnet with vent and bumper plate. 2" voice coil. 150 Watts / 290 Watts max. 18 -5 KHz freq. response. 87 dB @ 1W/1m.

CAT# GW-1248 \$36.95 each

TWEETERS

1.83" DIA. TWEETER

on a 3.08" x 4.42" flat black mounting plate. Mounting holes 2.5" x 2.82" centers.

CAT # SK-19 \$1.50 each

1 3/4" TWEETER W/CROSSOVER

Ford # F6DF-18808-AB Automotive tweeter with 24 uF inline crossover capacitor. Covered with a black metal grill. Mounting holes on 2.35" centers.

CAT # SK-47 \$ 1.50 each

3.75" SQUARE DOME TWEETER

3.75" square tweeter. 8 ohm. Pure titanium dome. 8 oz magnet. 1" voice coil. 60 Watts @ 5KHz. 3.5 - 25 KHz. 94 dB @ 1W/ 1m.

CAT# GT-322 \$7.50 each

3 5/8" ROUND **DOME TWEETER**

3 5/8" diameter tweeter. 8 ohm. Pure titanium dome. 8 oz magnet. 1" voice coil. 60 Watts @ 5KHz. Frequency response, 3.5K - 25 KHz. 94 dB @ 1W / 1m.

CAT# GT-324 \$7.50 each

3.25" SQUARE PIEZO

3.25" square, wide dispersion tweeter. 50 Watts RMS. Frequency response, 3.5K - 27 KHz. 94 dB @ 1W/ 1m. CAT# GT-1005 \$3.75 each

3.5" ROUND PIEZO

3.5" diameter, wide dispersion piezo tweeter.

60 Watts RMS @ 5 KHz. Frequency response, 3.5 - 30 Khz. 96 db @ 1W/ 1m.

CAT# GT-1056 \$3.50 each

3" X 7" PIEZO TWEETER HORN

3" X 7" wide dispersion horn tweeter. 60 Watts RMS. Frequency response, 1.8K -30 KHz. 90 dB @ 1W/ 1m.

CAT# GT-1025 \$4.25 each









INEXPENSIVE 2 WAY CROSSOVERS

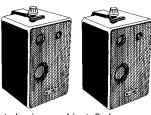
2.75" x 2.75" x 0.65". Specs unknown.

CAT # LX-156 75¢ each 10 for 60¢ each 100 for 40¢ each



WEATHERIZED SPEAKERS

Weatherized stereo speakers for indoor or outdoor use. Ideal as rear channel home theater speakers. 4" poly-propylene woofer, 2" mylar midrange and 3/4"



dome tweeter in a cast aluminum cabinet. 6 ohm impedance. Includes mounting bracket. Cabinet size 7.38" x 4.63" x 4.13". 50 Watts per speaker.

Black Cabinet.

CAT# DPI-60B \$49.00 per pair

White Cabinet.

CAT# DPI-60W \$49.00 per pair

SPEAKER TERMINALS

Red and black spring loaded terminals, marked - and +, generally used to connect speaker wires to speaker. Mounts in 1.85" dia. hole. Solder or quick connect terminals. CAT# SLT-2 75¢ ea. 10 for \$6.50



SPEAKER TERMINAL, GOLD BANANA JACKS

3" round recessed assembly.
Knurled, gold plated knobs and jacks. Knobs have color stripe for polarity. Can be used with dual banana plugs or up to AWG 12 wire. Fits 1.94" diameter cut out. Four screw mounting. Foam gasket.

CAT# SWT-500 \$2.25 each

COMMUNICATIONS SPEAKERS

Extension speaker for Ham,
CB, marine radio or business communications improves clarity in noisy environments. 4 ohms. Black case grill and adjustable mounting bracket. 5.5' cord with 3.5 mm mini plug. 3.18" x 2.72" x 1.8" deep.

Nokia #HFS-12 8 Ohm extension speaker with 5' cord terminated with 3.5mm mini-phone plug. Adjustable mounting bracket. Speaker dimensions: 4.2" x 2.14" x 2.34."

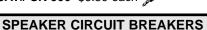
CAT# SK-664 \$6.00 each

CAT # SK-308 \$ 6.50 each

4 Ohm extension speaker. 3.15" x 3.15" x 2.37" deep. Adjustable mounting bracket. 6' cord with 3.5mm mini-phone plug.

CAT# SK-906 \$6.50 each





Auto reset breakers interrupt circuit when overloaded, then reset when temperature drops back to normal. Leads can be soldered or pc mounted.

CAT # CBR-1 1 AMP 2 for \$ 1.00 **CAT # CBR-1.25** 1.25 AMP 2 for \$ 1.00

TRIPOD SPEAKER STAND

Folding, adjustable-height tripod stand. Sturdy polished aluminum construction. 1" diameter upright. No assembly required. Extends to a maximum height 72."

CAT # SKS-1 \$30.00 each



120 VAC - 220 VAC - 110 VAC STEP-UP/STEP-DOWN TRANSFORMERS

AUTOFORMER --CAN BE USED EITHER WAY Convert 110 Vac to 220 Vac, or 220 Vac to 110 Vac. Three styles: All three styles include adaptors and/or switches to allow use either way. For use in Britain and the UK, CAT # CP-3 adaptor required.

Style A -Primarily for American use. Has a standard American 3-prong plug.

Otyle A -1 Illianly	ioi Amendan	use. Tias a standard American	3-proring plug	
max. wattage	weight	size	CAT#	Price
100 WATT	4 lbs.	5.30" X 3.25" X 5"	TC-100A	\$ 25.00
200 WATT	5 lbs.	5.25" X 3.25" X 5"	TC-200A	\$ 30.00
300 WATT	8 lbs.	6.25" X 3.82" X 4.47"	TC-300A	\$ 40.00
500 WATT	9 lbs.	7" X 3.82" X 4.47"	TC-500A	\$ 54.00
1000 WATT	18 lbs	9" X 4.8" X 6.15"	TC-1000A	\$ 80.00



Style E - Primarily for Europe and 220 Volt countries. Has a 2-prong (round pin) plug.

Style E - Primarily for Europe and 220 voil countries.		nas a z-prong (round	ı piri) piug.	
max. wattage	weight	size	CAT#	Price
100 WATT	5 lbs.	5.5" X 3.5" X 4"	TC-100E	\$ 25.00
200 WATT	6 lbs.	6" X 3.5" X 4.05"	TC-200E	\$ 30.00
300 WATT	8 lbs.	6.25" X 3.82" X 4.44"	TC-300E	\$ 40.00
500 WATT	9 lbs	7" X 3.82" X 4.47"	TC-500E	\$ 54.00
	max. wattage 100 WATT 200 WATT 300 WATT	max. wattage weight 100 WATT 5 lbs. 200 WATT 6 lbs. 300 WATT 8 lbs.	max. wattage weight size 100 WATT 5 lbs. 5.5" X 3.5" X 4" 200 WATT 6 lbs. 6" X 3.5" X 4.05" 300 WATT 8 lbs. 6.25" X 3.82" X 4.44"	100 WATT 5 lbs. 5.5" X 3.5" X 4" TC-100E 200 WATT 6 lbs. 6" X 3.5" X 4.05" TC-200E 300 WATT 8 lbs. 6.25" X 3.82" X 4.44" TC-300E



Style Universal - Cord with 2-prong plugs. Includes adaptors for 110 Volt use.

Has mounting to	eet for internal	use in equipment.		
max. wattage	weight	size	CAT#	Price
100 WATTS	3 lbs.	2 3/4" X 3 1/2" X 3 1/4" high	TC-100	\$20.00
200 WATTS	4 lbs.	2 3/4" X 4" X 3 1/4" high	TC-200	\$27.00
300 WATTS	5 1/2 lbs.	3" X 4" X 3 1/2" high	TC-300	\$37.50
500 WATTS	8 1/2 lbs.	3 1/4" X 5 1/2" X 4" high	TC-500	\$50.00
1300 WATTS	16 1/2 lbs.	4 3/4" X 7" X 5 1/2" high	TC-1300	\$85.00
2000 WATTS	29 lbs.	4 3/4" X 9" X 5 1/2" high	TC-2000	\$105.00
3000 WATTS	45 lbs.	8" X 13" X 7 1/4" high	TC-3000	\$175.00



PROJECT ENCLOSURES



MINI-ABS CASES

1.97" x 1.38" x 0.8"

Black or gray ABS plastic with interlocking lid. Integral standoffs for pc board mounting. Lid held in place with self-tapping #4 screws (included).

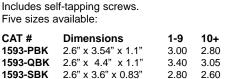


CAT # 1551-GGY	Gray	\$ 1.00 each
CAT # 1551-GBK	Black	\$ 1.00 each
2.36" x 1.38" x 0.8"		
CAT # 1551-HGY	Gray	\$ 1.20 each
CAT # 1551-HBK	Black	\$ 1.20 each
3.15" x 1.57" x 0.8"		
CAT # 1551-KGY	Gray	\$ 1.30 each
CAT # 1551-KBK	Black	\$ 1.30 each

HAND-HELD CASES with BATTERY COMPARTMENTS

Hammond Mfg. 1593 series. Black ABS plastic cases with removable front panels and panel for battery compartment. Integral pc board standoffs. Includes self-tapping screws.

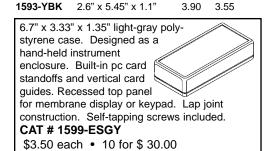
1593-TBK



3.25

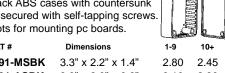
3.00

2.6" x 4.35" x 0.83"



GENERAL PURPOSE CASES

Black ABS cases with countersunk lid secured with self-tapping screws. Slots for mounting pc boards.



CAT #	Dimensions	1-9	10+
1591-MSBK	3.3" x 2.2" x 1.4"	2.80	2.45
1591-ASBK	3.9" x 2.0" x 0.8"	3.10	2.80
1591-BSBK	4.4" x 2.4" x 1.2"	3.35	3.00
1591-CSBK	4.7" x 2.6" x 1.55"	3.55	3.20

INSTRUMENT CASES

Gray ABS plastic. Two piece tongue and groove construction. 0.064" brushed aluminum front and rear panels. Integral pc standoffs.

Front and rear vertical pc board guides. Dimensions 10+ 1598-ASGY 6.1" x 3.65" x 1.36" 7.25 6.50 1598-BSGY 5.26" x 5.3" x 2" 8.00 7.20

BULKHEAD MOUNT CHASSIS BOXES

Black, break-resistant plastic chassis box, originally designed for an auto alarm. 5.18" X 3.36" X 1.25". Box has a matte black finish with a ribbed top and mounting flanges with holes on 5.5" centers. 0.5" X

2.25" slot in one end of box is handy for power cord or wiring harness. Two halves of box screw together with sheet metal screws (screws not provided).

CAT# MB-31 \$1.35 each

WALL-MOUNT BOX

Black, wall-mount chassis box. 6.375" x 3.75" x 2.28". 0.14" thick break-resistant plastic. Back panel has six holes for terminals along bottom edge which are not visible when box is wall-mounted. Back panel interlocks with front cover of box. A real solid, good-looking box. Maybe slightly blemished.

CAT # MB-80 \$2.50 each • 10 for \$20.00

PROJECT ENCLOSURES

Heavy-duty 3/32" molded plastic boxes with aluminum covers. Boxes have built in stand-offs for P.C. or perf boards. Each case has brushed aluminum cover and screws.

1-9

CAT#

FOUR SIZES TO CHOOSE FROM:

10-99

100+

2	2 11/16" >	(1 11/16" X	(1 3/16"
TB-1	\$1.75	\$1.60	\$1.50
3 5/16" X 2 1/8" X 1 3/8"			
TB-2	\$1.95	\$1.75	\$1.65
	4 1/8" >	(2 3/4" X 1	9/16"
TB-3	\$2.50	\$2.25	\$2.10
5 1/4" X 3 1/4" X 1 9/16"			
TB-4	\$3.30	\$3.00	\$2.80

PERF BOARDS ON PAGE 73 FIT ABOVE CASES .

PACTEC CASE

Pactec 6024-1 and 60255-1. Tan plastic project enclosure, 5.75" x 3.6" x 1.13. Crinkle finish on bottom and sides. Smooth finish on top surface. Interlocking top and bottom. Four holes for self-tapping screws (not included). CAT# MB-84 \$3.00 each

ENCLOSURE W/5V 2A POWER SUPPLY

Good-looking metal enclosure ideal for backup drive or project. Includes a 5 Volt, 2 Amp switching power supply. Back panel has input and output IEC power receptacles, an on/off rocker switch and cutouts for D-sub or other connectors. Front panel has a beige plastic face with rectangular 3.94" x 0.94"cutout. Power supply is attached to a removable metal L-bracket. Remaining interior space is 5.5" x 7" x 1.75." Overall size: 8.06" x 7.13" x 1.96. Rubber feet.

CAT # MB-85 \$ 9.50 each

PERF BOARDS

SOLDERABLE PERF BOARDS

Perf board with mounting holes designed to fit our project enclosures TB-1,2,3 and 4. Boards have holes on 0.1" matrix to fit most standard components and have copper solder rings on one side.

1 1/2" X 1 3/4". Fits TB-1 enclosure. CAT# PC-1 75¢ each

1 7/8" X 2 1/4". Fits TB-2 enclosure. CAT# PC-2 \$1.00 each

2 1/2" X 3 1/8". Fits TB-3 enclosure. CAT# PC-3 \$1.50 each

3" X 4 1/4". Fits TB-4 enclosure. CAT# PC-4 \$2.00 each



SOLDERABLE PERF BOARDS WITH SOLDER PADS AND BUSS STRIPS

6.3" x 3.94" multilayer epoxy boards with tinned copper pattern on one side. Five useful patterns for SIP and DIP components. Holes on 0.1" centers.

SINGLE HOLE PADS CAT # ECS-1 \$5.50 each

TWO HOLE PADS CAT # ECS-2 \$5.50 each

THREE HOLE PADS CAT # ECS-3 \$5.50 each

SOLID LINE PATTERN CAT # ECS-4 \$5.50 each



IC PATTERN WITH PADS AND BUSS STRIPS CAT # ECS-5 \$5.50 each



HALL EFFECT SWITCHES

BIPOLAR HALL EFFECT LATCH SURFACE MOUNT PACKAGE

Sprague# UGN3075LT (Allegro UGN3175LT). Operates on 4.5 V to 24 V. Open collector output. Activate with small, commercially available permanent magnets. Will not switch on removal of magnet field. Can sink 10 mA. With suitable output pull up, they can be used directly with bipolar or MOS logic circuits. Tiny SOT 89, surface-mount package, 0.175" x 0.09" x 0.06" thick.

Tape and reel packaging.

CAT# UGN-3075LT 4 for \$ 1.00

100 or more 17¢ ea. • 1000 or more 12¢ ea.

BIPOLAR HALL EFFECT SWITCH

Sprague # UGN3030T (Allegro UGN3130T). Operates on 4.5 V to 24 V. Open collector output. Can cleanly track rotation of multipole ring magnets in counter and control circuits. Can sink up to 20 mA at 100 kHz. Can be used directly with bipolar or MOS logic circuits. Threelead TO-92 package.

CAT # UGN-3030T 2 for \$ 1.20 100 or more 35¢ ea • 1000 or more 25¢ ea.

BREADBOARDS

Design and change circuits quickly and cleanly. Breadboards accommodate all sizes of dips and discrete components with lead diameters up to 0.32". Interconnect with solid hook-up wire (#22 AWG recommended). Wires and components can be used and re-used many times without damage to board or components.

400 tie points, perfect for smaller circuits. 300 contacts on main board and 50 contacts on each of two power distribution strips. Distribution strips are removable. Fits all DIP components. Suitable for 19-29 gauge solid wire.



CAT # PB-400 \$3.50 each

Inexpensive model. Large enough to design most experimental circuits. Contains main board and two power buss strips. 2 5/8" X 6 7/8" X 3/8" high CAT# PB-840 \$7.50 each

2 terminal strips, 4 distribution strips, 3 binding posts mounted on an aluminum back plate 5 1/8" X 6 7/8" X 3/8" high.

CAT# PB-1680 \$15.00 each

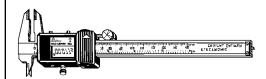
4 terminal strips, 7 distribution strips, 4 binding posts mounted on an aluminum back plate 7 7/8" X 8 3/4" X 3/8" high.

CAT# PB-3260 \$35.00 each

JUMPER WIRE SET

Pre-formed jumper wires for use with solderless breadboards. 10 pieces each of 14 different lengths from 0.14" to 4.92." Assorted colors, solid conductor wire. In a transparent box for quick and easy use. \$6.25 each CAT # WJ-70

CTRONIC CALIPERS



Precision steel caliper with thumbwheel adjustment for measurements to 6" (150mm). Easy to read LCD digital display, inch/mm conversion, zero at either position, auto-off, slide lock to hold position, hard-shell storage case. Operates on SR-44 button cell (included).

Resolution 0.01mm / 0.0005" Accuracy 0.03mm/ 0.001"

CAT # CAL-784 \$ 45.00 each

PC MATERIALS

MAKE PC BOARDS IN MINUTES From PHOTOCOPIER or LASER PRINTER

Thousands of people have discovered the easiest and quickest way to transfer pc board patterns to copper-clad board is

PRESS-N-PEEL by Techniks. Works great with CAD and PCB layouts as well as artwork from magazines and books.

No need for photochemicals or darkroom; use a photocopier or laser printer to transfer your design to the special **PRESS-N-PEEL** film. Then, simply iron the design onto a clean copper-clad board with a household iron. Peel off the film, and the board is ready for etching (etchant solution not included). Trace widths of 5 mil and less are possible with this method. We've seen excellent results with this system.

PRESS-N-PEEL consist of five 8 1/2" X 11" sheets of transfer film and complete instructions.

CAT# TEK-5 \$11.95

2 packs (10 sheets) \$17.50

5 packs (25 sheets) \$37.50

DIRECT ETCH™ P.C. KIT

Design your own pc boards. Etch in ferric chloride solution and in a few minutes board is ready to be drilled and loaded with components. Kit includes etch-resist patterns, copper-clad boards, ferric chloride and instructions.



CAT# ER-1 \$15.00 each

DRY CONCENTRATED ETCHANT

1/4 lb. of anhydrous ferric chloride. Makes one pint of etch solution, enough to etch 200 square inches of copper-clad board. Can be used with ER-1 or TEK-5. **CAT# ER-3** \$4.00 each

TINNIT™ ELECTROLESS BRIGHT TIN PLATE

Designed to plate bare copper circuit boards to enhance solderability. The material is supplied as a dry mixture with an indefinite shelf life. When mixed with water, it has a shelf life of approx. two months. No electricity required. Will plate up to 600 square inches. Makes 1 pint.

CAT# ER-18 \$5.50 each

COPPER CLAD BOARD

SINGLE-SIDED PC BOARDS

4" X 6" X 0.062" thick. CAT# PCB-46 \$2.00 each

6" X 12" X 0.062" thick. **CAT# PCB-612** \$5.00 each



SOLDERING ACCESSORIES

30 WATT SOLDERING IRON



U.L. listed. 30 watt soldering iron. Ideal for P.C. work. **CAT# IR-30** \$4.50 each

WELLER SOLDER IRONS

These Weller soldering irons combine economy with performance for all types of soldering jobs. Tips are replaceable. UL listed



25 Watt 700 degree F.

Comes with PL-111 pencil tip. CAT # USI-3125 \$19.00

40 Watt 900 degree F.

Comes with long taper chisel tip.

CAT # USI-3140 \$24.00



REPLACEMENT TIPS FOR WELLER IRONS

Chisel

CAT # PL-113 \$6.00

Pencil

CAT # PL-111 \$6.00

Micro Spade

CAT # PL-114 \$6.00



SOLDER STAND

Spring steel soldering iron holder. Includes replaceable pad for cleaning iron tip.

CAT# 50B-205 \$4.00 each



SOLDER SUCKER



High performance cleaning tool which offers excellent suction for solder removal.

CAT# 50B-410 \$5.00 each

60/40 SOLDER



18 ga. 60/40 rosin core. Solder in a convenient tube. 110". CAT# TS-110 \$1.25 each

60/40 SOLDER ROLLS

<u>1/2 pound Roll .032 dia.</u> CAT# SOL-532 \$4.50 / roll



1 pound Roll .032 diameter CAT# SOL-032 \$7.50 / roll



ROSIN SOLDERING PASTE/FI UX

PASTE/FLUX

PHILMORE # \$1207 Soldering paste flux. 2 oz. can. CAT# SP-44 \$2.00 each





DE-SOLDERING WICK

For easy removal of parts from P.C. boards. Top quality solder wick. 5 feet per spool. 1/16" wide. **CAT# SWK** \$1.00 per spool

HELPING HAND with MAGNIFIER

Will hold P.C. board or other small items and allow both your hands freedom to work. Magnifying lens makes work easy to see.



\$4.50 each



TOOLS

6 PIECE PRECISION SCREWDRIVER SET

Long screwdrivers with small blades; great for small screws in hard to reach areas. Three Phillips and three straight blade drivers, 2.4 mm, 3.0 mm, 3.8 mm



20 PIECE SET - PRECISION BITS FOR ELECTRONICS

Popular miniature bits for electronics

with a specially designed handle with a swivel cap. Chrome-vanadium steel. Hard-shell plastic storage case. Includes: 2 Phillips (PH0-0, PH0), 4 Flat (2.0, 2.5, 3.0, 4.0), 5 Torx (T6, T7, T8, T9, T10), 3 Hex (1.5, 2.0, 2.5),



3 Ball (T1.5, T2.0, T2.5), 2 Cross (PZ0-0, PZ0). **CAT # PSS-20** \$19.95 each

MINI PLASTIC SCREWDRIVER

1 3/4" long plastic screwdriver.
Ideal for adjusting trimmer
pots and caps. CAT# PSS-1

4 for \$1.00 • 100 for \$15.00

INSULATED SCREWDRIVER SET

Right-Tech # E104.
8 assorted Phillips and straight-blade screw-drivers, including one ac/dc 80-250V screwdriver-probe / voltage tester. Range in length from

9.75" to 6". Chrome-vanadium steel blades. Magnetic tips to hold screws. Fully-insulated to the last 1/2" of blade. Complies with ASTMF standards.

CAT# PSS-11 \$6.95 each

HEMOSTATS

Hemostats are great for clamping onto small components while soldering or desoldering. Stainless steel.

5" STRAIGHT TIP CAT# HM-1 \$1.25 each

5" CURVED TIP CAT# HM-2 \$1.25 each



WIRE STRIPPER

Stripper and cutting tool. Stripper adjusts from 24 to 12 ga wire. Spring-loaded to open after each usage. Plastic grips CAT# WS-150 \$2.50 each

9 PIECE ASSORTMENT (USED) CARBIDE DRILL BITS

9 carbide bits varying in size from # 71 to 1/16". All bits have 1/8"

shanks with collars. The assortment is random and may include more than one of a particular size. **CAT# DRB-9** \$4.50 Per Set

PLASTIC 20 CC SYRINGE

Gainor Medical. Large, individually wrapped plastic syringe ideal for

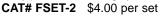


accurate dispensing of liquids. Calibration markings in ounces and CCs or mls. 0.83" dia. x 4.33" long body. Tip is 0.45" long with a 1.5 mm opening.

CAT# SRG-2 \$1.75 each

10 PIECE NEEDLE FILE SET

Assortment of 10, 5 1/2" long needle files including round, flat, triangular and half-round files. Ideal for precision work on models and proto-types. Includes handy pocket-size storage pouch.





5 PIECE TWEEZER SET

Five piece assortment of 4 1/2" long stainless steel tweezers. Includes 2 fine-point tweezers, curved-tip fine-point tweezers, spade-tip and flat-tip tweezers. Includes storage pouch.

CAT# TW-5 \$5.00 per set



PLASTIC CLAMP-TYPE TWEEZERS

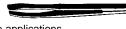
Plastic tweezer with serrated jaws for holding items up to 0.25" diameter.

CAT # TW-8 3 for \$1.00



PLASTIC FLAT-NOSED TWEEZERS

Ideal for holding small, thin or flat items.



Good for static-sensitive applications.

CAT # TW-7 3 for \$1.00

NIBBLER / CUTTER

Cuts up to 18 ga. steel or 1/16" copper and other unhardened metals. Gives you the ability to make square holes for fuse holders, special connectors, displays, etc. Easy to use, simply drill 3/8" hole, insert cutting head and compress handle.

CAT# NCT \$10.00 each

4 1/2" FLUSH CUTTER

Trim leads on PC boards. Thin cutting edge for hard to reach areas. Useful for jewelry, fishing and electronics. Insulated handle. Spring return.

CAT # FC-12 \$3.00 each





7" LONG WIRE BRUSHES

Set of three industrial cleaning brushes. One each of brass, stainless steel and nylon bristle.



CAT # WB-772 \$1.75 per set

PRECISION DUSTER



6" brush with natural bristles on one side, stiffer PVC bristles on other side for hard to clean areas. Ideal for automobile consoles, air vents, any device with slots or holes. CAT # BSH-8 \$1.25 each



Facilitates retrieval of small metal parts. Adjustable. Extends to 23" overall length. CAT # MAG-31 \$3.00 each

NYLON SPRING CLAMPS

Hold down your work-inprogress with these rugged nylon spring clamps. Swivel jaws stay parallel on materials of varving thickness. Available in 3 sizes:



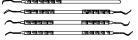
3.75" long CAT # SCL-20 2 for \$ 1.00 4.75" long CAT # SCL-40 \$ 1.00 each 6.5" long CAT # SCL-60 \$ 1.50 each

WIRING TOOL

Harris-Dracon Plastic tool with hook on one end and bent wire on other end. CAT# WT-1 50¢ each • 10 for \$4.00

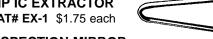
4 PIECE PICK SET

4 top quality dental style picks. Ideal for removing material from hard to reach places.



CAT# PSET \$3.50 per set

DIP IC EXTRACTOR CAT# EX-1 \$1.75 each

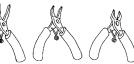


INSPECTION MIRROR

Non-conductive plastic handle. Individually wrapped dental-type mirror. Ideal for inspecting hard-to-reach places. CAT# MIR-7 2 for \$ 1.00

3 PIECE CARBON STEEL MINI PLIERS SET

3" spring-action carbon steel pliers with insulated handles. Ideal for soldering wiring



and working on models and small projects. Needlenose, bent needle-nose and end nippers.

CAT # CP-33 \$ 5.95 per set

ELECTRICAL

3/4" WIDE

Black PVC - 60' CAT# PET-1 65¢ each • 10 for \$6.00



2" EXTRA-WIDE

Black PVC - 60 yards CAT# PET-4 \$2.50 per roll

TEST EQUIPMENT AND **ACCESSORIES**

PORTABLE OSCILLOSCOPE

Velleman # HPS5 Personal Scope™. 5 MHz maximum sample rate. Input impedance: 1M ohm/20pF (standard scope probe). Maximum input voltage 100 V peak (AC or DC). Timebase range: 2us to 20s/div. Input sensitivity: 5mV to 20V/div. High-contrast 64 x 128 pixel LCD graphic display. True RMS and dB measurements. Screen hold function. Operates on 5 AA

batteries (not included). Use alkaline, or rechargeable NiCad or NiMH. Recommend 9 Vdc power supply, our CAT # DCTX-935.

CAT# HPS-5 \$189.95 each

SCOPE PROBE SETS

Scope probe with BNC connector to match most equipment. Comes with ground lead, retractable hook tip, pin tip with IC lead cover and standard cover.



CAT # PR-60 60 MHz \$19.50 each 100 MHz **CAT # PR-100** \$29.50 each

CHECK THIS OUT! 3 1/2 DIGIT LCD **MULTIMETER WITH BACKLIGHT**

Velleman # DVM850BL For features. accuracy and ruggedness, this is the best inexpensive multimeter we've ever seen. DC current (10 A), DC and AC voltage (600 V),



resistance (2 M ohm), diode, transistor tester, audible continuity and hold button. Protective rubber shell and test leads included.

CAT # DVM-850BL \$17.95 each

3 1/2 DIGIT LCD MULTI-FUNCTION LCD METER

Velleman # DVM890 An incredible array of features at a great price. 20A DC current, 1000 DC Volts. 20A AC current. 700 AC volts. Resistance to 20 M. Capacitance from 2000pF to 20uF. Frequency

measurement to 20kHz.

Temperature measurement: -50 deg C to +1000 deg C with K-type thermocouple. Low battery indication, overload protection and auto power off function. Protective rubber shell, test leads and thermocouple included.

CAT # DVM-890 \$45.00 each

POCKET MULTIMETER

Right-Tech # 53311.

An inexpensive general-purpose tester for working on simple projects around the home or office. 18 ranges. Measures AC. DC voltage to 500V. DC Amps to

250 mA. Resistance to 500K ohm. Checks AAA, AA, C, D button and 9 V batteries. Fuse and diode

protected circuitry. Built-in self-storing leads. Instructions included. Requires one AAA battery (not included). UL listed.

CAT# VOM-1 \$7.95 each

TEST LEADS

Replace broken or intermittent test leads. Red and black lead set with banana plug on one end and pin probe on other end. 3 ft. long.

CAT# TL-100 \$2.00 per set

5 1/2" HOOK TEST PROBES

5 1/2" long spring-loaded hook test probes can reach further and hook onto slightly larger items than the minihooks above. These have a thumbscrew terminal which can easily be connected to a banana plug, pin plug or a piece of wire. Sold in sets of two, one red, one black. CAT# MTC-21 set of 2 for \$3.00

ALLIGATOR CLIPS

3" INSULATED CLIPS

30 amp alligator clips. One Red One Black CAT# ALG-3 \$1.00 per set



FOUR INSULATED ALLIGATOR CLIPS

Two-inch clips with insulating boots. 2 black, 2 red per package.

CAT # ALG-10

\$1.50 per package of 4 clips

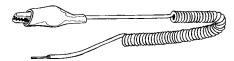
30 AMP INSULATED ALLIGATOR CLIP

Heavy-duty, 30 Amp clip with insulating boot. 2.5" long x 0.6" wide. Available with red insulating boot only.

CAT # ALG-13 2 for \$ 1.30



COIL CORD WITH ALLIGATOR CLIP



Light-gray coil cord with insulated 1" alligator clip on one end. Good-quality, very durable, very flexible cord. Single conductor 20 gauge stranded wire, stripped and tinned on one end. Cord extends 6 feet. Retracts to 2 feet.

CAT# ALG-12 \$1.25 each 100 for 95¢ each • 500 for 75¢ each

MINI-HOOKS AND JUMPERS

Mini-hooks are great for connection to parts in high-density areas. They give a firm, insulated connection

1 1/2" MINI-HOOK JUMPERS

Two 18" long mini-hook patch cords. One black, one red, with 1.5" long mini-hooks on each end.

CAT# MTC-2 set of 2 for \$2.75

2" MINI-HOOK JUMPERS

Five 18" long mini-hook patch cords. Black, red, white, green and yellow.

CAT# MTC-5 set of 5 for \$6.00

JUMPER TEST LEADS

MINI JUMPERS

10 TEST LEADS- 1" CLIPS 2 each of 5 colors.

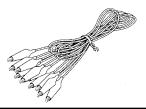
CAT# MTL-10 \$2.50 per set

REGULAR **JUMPERS**

5 TEST LEADS 2" CLIPS

CAT# HDTL-5

\$2.50 per set



HOT-MELT GLUE GUN

Ideal for quick repairs and assembly. Uses standard glue sticks. Includes two 2.9" sticks. UL.

CAT # GN-1 \$4.75 each



EPOXY RESIN - SINGLE USE PACKETS

Great for bonding, sealing and repairing, concrete, wood, stone, metal and most plastics. Clear resin and hardener in separated foil packet.

Simply tear off the end, squeeze out equal amounts of resin and hardener, mix and use. Each packet contains 0.14 oz (4 grams). General Purpose. Quick setting - sets in 3-5 minutes at 75

CAT# EPOX-1 dearees F. 2 for \$1.00 • 10 for \$4.00 • 100 for \$30.00

ALUMINUM FOIL TAPE 2" X 20'

3M #49. 2" wide aluminum foil tape. Designed for use as a moisture vapor barrier in communication cable splices and as a splicing shield to reduce cross talk and high frequency radiation interference. Approved for use in REA Cable Splicing Specifications. 2" x 20 FOOT ROLL.

CAT# ALT-2 \$3.00 each



EPDX

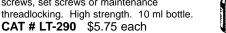
SILICONE SPRAY

UniSport #070307 Silicone Spray Aerosol spray lubricant for bicycle cables and chains, rifles, fishing gear, exercise equipment. 2 oz spray bottle.

CAT # SSY-1 \$1.75 each



Loctite 290. For use on preassembled parts. Ideal for adjustment screws, set screws or maintenance threadlocking. High strength. 10 ml bottle.



PURETRONICS CLEANERS & SPECIALTY PRODUCTS

CONTACT CLEANER

Quick penetrating, zero residue contact cleaner removes oils, greases, grime, dirt silicones, fluxes and other contaminants. Evaporates quickly. Safe on plastics and metal materials. Ozone friendly containing no CFCs or HCFCs.

CAT # PTR-3000

5.5 oz aerosol can \$3.79 each 12 cans \$42.00 (\$3.50 each)

CAT # PTR-3500

12.25 oz aerosol can \$ 5.79 each 12 cans \$63.00 (\$5.25 each)

CONTACT CLEANER AND LUBRICANT. 13 0Z

Removes oils, dirt and other contaminants and leaves a thin coating of silicone to lubricate and protect. Safe on plastics. Ozone friendly. 13 oz aerosol can.

CAT# PTR-5000 \$6.50 each

VALUE DUSTER

Moisture free, zero residue dusting gas. Removes dust, dirt, lint and other contaminants. Up to 70 psi. 10 oz trigger-control aerosol can. CAT # PTR-7000 \$ 5.75 each

PRECISION DUSTER, 10 OZ

Helps remove microscopic particles like dust, lint, dirt, oxides and other dry contaminates. Excellent preventative maintenance tool for electronics, optical and mechanical components. Also assists the evaporation of slow drying solvents. Exceptionally pure 134A HFC. 10 oz trigger-control spray can.

CAT# PTR-7200 \$6.50 each

CIRCUIT FREEZE

Helps locate thermal intermittent defective resistors, capacitors and semiconductors. Helps locate cold solder joints and pc board cracks. 10 oz trigger-control spray can. CAT # PTR-7400 \$ 6.95 each

FLUX REMOVER, 13 OZ CAN

Removes most types of flux including rosin and rosin based no-clean flux. Dissolves and flushes away fluxes, oils, grease, grime, dirt, silicones and other contaminants. Evaporates quickly. Safe on plastic and metal surfaces. 13 oz aerosol can.

CAT# PTR-6000

\$6.35 each

INTEGRATED CIRCUITS

VOLTAGE REGULATORS

POSITIVE REGULATORS

CAT#	DESCRIPTION	CASE	each
7805T	+5 VOLT 1 AMP (LM340T-5)	TO-220	.50
78M05	+5 VOLT 500 MA (1/2 A)	TO-220	.50
7806T	+6 VOLT 1 AMP (LM340T-6)	TO-220	.50
7808T	+8 VOLT 1 AMP (LM340T-8)	TO-220	.50
7812T	+12 VOLT 1 AMP (LM340T-12)	TO-220	.50
78M12	+12 VOLT	TO-202	.35
7815T	+15 VOLT 1 AMP (LM340T-15)	TO-220	.50
78L05	+5 VOLT 100MA	TO-92	.40
78L12	+12 VOLT 100MA	TO-92	.40

NEGATIVE REGULATORS

LM350T

7905K	-5 VOLT 1 AMP (LM320K-5)	TO-3	1.75				
7905T	-5 VOLT 1 AMP (LM320T-5)	TO-220	.50				
7912T	-12 VOLT 1 AMP (LM320T-12)	TO-220	.50				
ADJUSTABLE REGULATORS							
LM317T	ADJ. POSITIVE (1.2-37V)	TO-220	.50				
LM317LZ	ADJ. POSITIVE (1.2-37V)	TO-92	.40				

ADJ. NEGATIVE (1.2-37V)

ADJ. POSITIVE 3 AMP

OTHER ICS

TO-220

TO-220

3.50

CAT#	DESCRIPTION	# of pins	each
74ACT14	HEX SCHMITT TRIGGER INV	(14)	.35
74HCU04E	HEX INVERTER, CMOS	(14)	.35
74HC00	2 IN NAND GATE	(14)	.30
74HC05	HEX INVERTER	(14)	.40
74HC123	DUAL MONO MULTIVIBRATOR	(16)	.30
74HC139	DUAL 2:4 DECODE/DEMUX	(16)	.35
74HC244	OCTAL BUFFER LINE DRIVER	(20)	.58
74HC32	QUAD 2 IN OR GATE	(14)	.35
74HC373	OCTAL D LATCH	(20)	.45
74HC74	DUAL D-TYPE FLIP FLOP	(14)	.29
74HCT244	OCTAL BUFFER LINE DRIVER	(20)	.60
74LS47	BCD TO 7-SEG DEC/DRIVER (OC)	(16)	.90
4001	QUAD NOR GATE	(14)	.25
4017	DECADE COUNTER / DIVIDER	(16)	.40
4077	QUAD NOR GATE	(14)	.50
MC14078	8-INPUT NOR GATE	(14)	.15
MC14099	8 BIT ADDRESSABLE LATCH	(16)	.39
MC145027	REMOTE CONTROL DEC (5 BIT)	(16)	.69
MC14528	DUAL MONO. MULTIVIBRATOR	(16)	.55

LINEAR SERIES

CAT#	DESCRIPTION	# of pins	each
ADM202EAN	Line driver receiver	(16)	.75
TLO82	J-FET IN DUAL OP AMP	(8)	.70
LM311	COMPARATOR	(8)	.50
LM324	QUAD OP AMP	(14)	.50
LM339	QUAD COMP	(14)	.60
LF353	DUAL BI-FET OP AMP	(8)	.50
LF355N	OP AMP	(8)	.45
LM358	DUAL OP AMP	(8)	.40
LM380	2 WATT AUDIO AMP	(14)	1.80
LM386N-1	AUDIO AMP .25 W.	(8)	.40
LM555	TIMER	(8)	.75
ICM7555	CMOS TIMER "555"	(8)	1.00
LM556	DUAL (555) TIMER	(14)	.45
LM567	TONE DECODER	(8)	.90
LM741	OP AMP (MC1741)	(8)	.55
AD841J	OP AMP	(14)	.75
MC1458	DUAL OP AMP (MC4558)	(8)	.50
MC1489	QUAD LINE RECEIVER	(14)	.60
LM1496	BALANCED MOD/DEMOD	(14)	.69
MC33078P	DUAL OP AMP	(8)	.40
MC3401	QUAD OPAMP EQUIV 3900	(14)	.45
LM3914	BARGRAPH DISPLAY DRIVER		1.75
LM3915	3DB STEPS BG DISPLAY DR	` '	2.75
NE5534	LOW NOISE OP AMP	(8)	1.25
ULN2003	DARLINGTON ARRAY	(16)	.75
LM6321N	BUFFER AMP	(8)	1.85

NE556 - DUAL TIMER

14 PIN DIP package.

CAT # LM556 45¢ each • 25 for \$10.00 (40¢ ea) 100 for \$ 35.00 (35¢ ea) • 500 for \$ 150.00 (30¢ ea.)





LOW POWER AUDIO AMPLIFIER

Motorola MC34119P. Low power audio amplifier suitable for speaker phones or talking picture frames. The 8 pin DIP package requires only a few additional parts, operates on 2 - 16 volts and drives speakers of 8 ohms or greater. Output power exceeds 250 mW with 32 ohm speaker. Power-down option saves power in battery driven applications. Includes hook-up sheet.

CAT # MC34119P 50¢ each 50 pieces - \$20.00 • 500 pieces - \$150.00 1000 pieces - \$250.00

FAHRENHEIT TEMPERATURE SENSOR



National Semiconductor # LM34DZ. Precision integrated circuit temperature sensor whose voltage is linearly proportional to the Fahrenheit temperature. TO-92 package. Operates on 5 - 30 volts. Requires no external calibration or trimming to provide accuracies of ± 1 degree F at room temperature. Operates on +32 to +212 degrees F. Spec. sheet available.

CAT# LM34DZ \$2.50 each

KEYPAD ENCODER IC

E-Lab# EDE1144. Designed to interface a matrix-type 4 row x 4 column (16 key or less) keypad with a microcontroller or other host processor. Provides enhanced keypad features such as contact debouncing and key auto-repeat and keybeep feedback to operator. Electrically quiet (reduced EMI) keypad scanning. Serial/ parallel outputs available. 18 pin DIP package. Includes full documentation.

CAT # EDE-1144 \$ 7.50 each

SERIAL LCD INTERFACE IC

E-Lab # EDE702. Allows nearly any text-based LCD module to be controlled via a simple one-wire data link. A cost-effective LCD control solution for a wide variety of embedded designs. RS232 and TTL level compatible. 18 pin DIP package. Includes full docu-CAT# EDE-702 \$ 8.95 each mentation.

7 SEGMENT LED CONTROLLER IC

E-Lab # EDE707. Handles up to eight 7-segment LED displays, tremendously reducing I/O demand on your host microcontroller as well as eliminating display refresh/scan software overheads. Features include leading zero blanking, counter functionality, an overflow flag and a full 0-9, A-F Hex character set. 28 pin dip package. Includes full documentation.

CAT # EDE-707 \$ 9.95 each

STEPPER MOTOR CONTROLLER IC

E-Lab # EDE-1200 and # EDE-1204 5 Vdc, 18 pin ICs designed to interface a logic-level signal to a stepper motor. Capable of self-clocking in the "RUN" mode, as well as external clocking in the "STEP" mode. Allows for half-stepping, directional control, continuous run and stepping rate changes while the motor is stepping. TTL/CMOS inputs. TTL-level outputs. Includes specs and hook-up diagram.

FOR UNIPOLAR STEPPER MOTORS (6 wire motors) CAT # EDE-1200 \$ 8.30 each

FOR BIPOLAR STEPPER MOTORS (4 wire motors) CAT # EDE-1204 \$ 8.30 each

MEMORY

DESCRIPTION 512 x 8 SRAM 628512ALP-7 (32)\$11.00 AT29C040A Flash Memory (32)\$11.00

CMOS PIC MICROCONTROLLER

MCU w/ A-D 1K 4 mHz PIC16C711-04 (18)

OPTOISOLATORS

6 pin DIP package.

CAT#	Description	1	10	100
IL2 (NEW)	NPN transistor output	.35	.30	.25
4N25	NPN transistor output	.35	.30	.20
4N26	NPN transistor output	.35	.30	.20
4N27	NPN transistor output	.35	.30	.20
4N33	NPN darlington output	.45	.40	.30
4N35	NPN transistor output	.50	.45	.35
MCT9001	Dual NPN transistor	.60	.55	.45

VOLTAGE TO FREQUENCY CONVERTER



Exar # XR4151P. Converts DC voltage into a proportional pulse repetition frequency or vice versa. Useful in A/D and D/A conversion and data transmission. 8 pin DIP package.

CAT# XR4151P 80¢ each • 100 for 65¢ ea.

IC SOCKETS

SOI DEDTAIL



JUL	SOLDLIVIAL						
PINS	CAT#	1-49	50-99	100+			
8	ICS-8	.20	.15	.10			
14	ICS-14	.20	.15	.10			
16	ICS-16	.25	.20	.15			
18	ICS-18	.30	.25	.20			
20	ICS-20	.40	.35	.30			

Special Reduced Price!					
24	ICS-24	.15	.12	.10	
	1000	for \$50.0	0 (5¢ each))	

28 ICS-28 35 45 40

HIGH RELIABILITY (MACHINED PINS) SOLDERTAIL



•	,		
PINS	CAT#	1-99	100+
8	HRICS-8	.60	.55
14	HRICS-14	.50	.40
16	HRICS-16	.75	.45
22	HRICS-22	.90	.80
28	HRICS-28	.50	.25
64	HRICS-64	\$2.00	\$1.50

Special!

WIRE WRAP SOCKETS

AAIL	WIRE WRAP SOCKETS						
PINS	CAT#	1-99	100+				
8	WWICS-8	1.00	.85				
14	WWICS-14	1.25	1.00				
16	WWICS-16	1.25	1.00				
18	WWICS-18	1.25	1.00				
24	WWICS-24	\$1.20	\$1.10				
36	WWICS-36	\$1.25	\$1.05				



CERAMIC RESONATORS

4 Mhz CAT# CER-4 \$1.00 each CAT# CER-16 16 MHZ \$1.00 each 20 Mhz CAT# CER-20 \$1.00 each



METAL OXIDE VARISTO

Used to protect sensitive components from voltage surges

HARRIS# V47ZA7

47 volts nominal. 8.8 Joules. Peak pulse current 1000 amps. 14mm diameter.

CAT# MOV-47 2 for \$1.00 • 100 for \$20.00



TRANSISTORS



CROSS TO NTF/FCG

CAT#



	CAT#	NTE/ECG	TYPE	CASE	1 -99	100+	1000+
	D45H5	378	PNP	TO-220	75¢	.65	.50
	PN2222A	123AP	NPN	TO-92	5 for 80¢	.15	.13
	2N2222A	123A	NPN	TO-18	2 for 1.00	.40	.35
	PN2905	159	PNP	TO-92	5 for 50¢	.08	.06
	PN2907	159	PNP	TO-92	5 for .75	.10	.08
	2N3055	130	NPN	TO-3	1.00	.85	.75
- [Heavy-duty 2	N3055 16A	120 V				
	2N3055HV		NPN	TO-3	1.25	1.00	.85
	PN3646	123AP	NPN	TO-92	5 for .75	.08	.06
	2N3904	123AP	NPN	TO-92	5 for .75	.13	.10
	2N3906	159	PNP	TO-92	5 for .75	.13	.10
	2N4124	123AP	NPN	TO-92	5 for 75¢	.13	.10
	2N4400	123AP	NPN	TO-92	5 for 50¢	.08	.06
	2N4401	123AP	NPN	TO-92	5 for .75	.13	.10
	2N4403	159	PNP	TO-92	5 for 50¢	.08	.06
	2N5657	157	NPN	TO-126	1.00	.75	-
	2N5772	108/123AP		TO-92	5 for 50¢	.08	.06
	2SC2352	69	NPN	TO-92	3 for 1.00	.29	.25
	AR-24	125/184	NPN	TO-220	.50	.40	.30
	MJ15015	ECG 388	NPN	TO-3	1.50	1.00	.75
	MPS2369	107/123AP	NPN	TO-92	5 for 50¢	.08	.06
	MPS3638A	159	PNP	TO-92	5 for 50¢	.08	.06
	MPS3704	123AP	NPN	TO-92	5 for 50¢	.08	.06
	MPS6534	159	PNP	TO-92	5 for 50¢	.08	.06
	MPS8093	159	PNP	TO-92	5 for 50¢	.08	.06
	MPS8599	159	PNP	TO-92	5 for 50¢	.08	.06
	MPSA20	123AP	NPN	TO-92	5 for 50¢	.08	.06
	MPSA92	288	PNP	TO-92	3 for \$1.00	.28	.24
	TIP30	292	PNP	TO-220	.75	.65	.50
	TIP31C	291	NPN	TO-220	.50	.40	.30
	TIP32C	292	PNP	TO-220	.65	.40	.35
	TIP2955	393	PNP	TO-218	.65	.40	.35
	TIP3055		NPN	TO-218	.65	.40	.35

DARLINGTON TRANSISTORS

	CROSS TO				
CAT#	NTE/ECG	TYPE	CASE	1 - 99	100+
D40K1	268	NPN	TO-202	.75	.65
GES-5307	46	NPN	TO-92	5 for 50¢	.08
MJ10009	98	NPN	TO-3	3.50	2.25
MPSA13	46	NPN	TO-92	5 for 50¢	.08
TIP120	261	NPN	TO-220	.75	.65
TIP142	270	NPN	TO-218	1.00	.75
TIP147	271	PNP	TO-218	1.25	.85

TOSHIBA TO-3 POWER TRANSISTORS

15A

150W

Complementary pair, NPN and PNP, audio amplifier output transistors.

NTE/ECG 285 2SB554 **PNP** NPN 2SD424 NTE/ ECG 284

160V Specs: Vcbo lc Vceo 160V Pc PNP **CAT # 2SB554** \$3.75 each

10 for \$3.25 each • 100 for \$2.50 each CAT # 2SD424 \$2.75 each 10 for \$2.25 each • 100 for \$1.65 each

S.C.R.s

2N5064 3 / \$1.00 0.8 200 TO-92 3.00 **IS08S** 8 50 TO-202 2 / \$1.50 7.00

TRIACs

CAT# VOLT CASE SC141D 6 400 TO-220 \$1.00 9.00 BTA12-600C 12 600 TO-220 \$1.50 12.00

BILATERAL TRIGGER (DIAC)

_____ CAT # DB-3 28-36 volt 3 for \$1.00 100/\$27.00

MOSFETS

IRF522 N-Channel MOSFET. 100 Volt, 8 Amp, 60 W. TO-220 case. **CAT # IRF522** 65¢ each 10 for 55¢ each • 100 for 40¢ each





IRF9Z30 P CHANNEL HEXFET

Samsung P-channel MOSFET. 50 Volts, 18 Amps. TO-220 case. **CAT # IRF9Z30** \$1.25 ea. • 50 for \$1.00 ea. 500 for 65¢ each • 1000 for 50¢ each

HARRIS IRFD110 HEXFET, DIP

N channel Power Mosfet. 100 Volts, 0.54 Ohms, 1 Amp, 1.3 Watts. 4 pin DIP package. **CAT # IRFD110** 50¢ each • 100 for \$35.00

PROGRAMMABLE UNIJUNCTION

2N6028 (PUT) TO-92 plastic case. CAT# 2N6028 3 for \$1.00 • 100 for \$25.00

J FETS



SPECIAL!

J176 P-CHANNEL TO-92 CAT# J176 5 for \$1.00

PHOTO-TRANSISTOR

Ledtech # LT9593-91-0125 Water-clear T 1 3/4 w/ flat face. CAT # PTR-1 2 for \$1.30 • 50 for \$25.00

TRANSISTOR HARDWARE

TO-3 SOCKET CAT # STR-3

2 for \$ 1.00 • 100 for \$ 35.00



TO-92 SOCKET CAT# STR-92

4 for \$1.00 • 100 for \$20.00



SHOULDER WASHER

For insulating the mounting holes on TO-3 transistors. Fits 0.15" diameter holes. CAT# WS-4 100 for \$2.50 • 1000 for \$15.00

DIODES

40 AMP 600 VOLT RECTIFIERS

D0-5 case,

stud-mount rectifier.



1N1190A Cathode case \$ 3.50 each 1N1190AR Anode case \$ 3.50 each

HIGH VOLTAGE RECTIFIER

CAT# VOLT **AMP** PRICE 100 1000 R6000 6000 300.00 0.2 .50 40.00

FAST RECOVERY RECTIFIER

GI 822. 5 Amp 200 Volt fast recovery rectifier. T6L axial package. CAT # GI822 3 for \$1.00

100 for \$25.00 • 1000 for \$150.00



RECTIFIER DIODES

CAT#	VOLT	AMP	PRICE	100	1000
1N4001	50	1	15/\$1.00	5.00	40.00
1N4002	100	1	12/\$1.00	6.00	50.00
1N4003	200	1	10/\$1.00	8.00	70.00
1N4004	400	1	9/\$1.00	9.00	75.00
1N4005	600	1	8/\$1.00	10.00	85.00
1N4007	1000	1	6/\$1.00	12.00	100.00
1N5400	50	3	3/ 60¢	12.50	100.00
1N5402	200	3	3/ 70¢	15.00	110.00
1N5404	400	3	3/80¢	17.00	130.00
1N5408	1000	3	3/\$1.00	30.00	250.00
D620	200	6	2/ 90¢	40.00	350.00
D660	600	6	2/\$1.00	45.00	400.00

SCHOTTKEY DIODES

CAT#	amp	PIV	price	100	1000
1N5817	1	20	3/\$1.00	27.00	230.00
1N5819	1	40	3/\$1.00	27.00	230.00
1N5822	3	40	3/\$1.25	35.00	300.00
SR505	5	50	2/\$1.00	40.00	-

GERMANIUM DIODE

1N60A germanium diode. DO-7 case style. 40 V. CAT# 1N60 2 for \$1.00

1 WATT ZENER DIODES

All 1 Watt Zeners listed are 4 OF ONE VALUE \$1.00 100 OF ONE VALUE \$20.00

CAT#	VOLTAGE	CAT#	VOLTAGE	CAT#	VOLTAGE
1N4728	3.3	1N4740	10	1N4745	16
1N4730	3.9	1N4742	12	1N4748	22
1N4731	4.3	1N4744	15	1N4749	24
1N4733	5.1	<u> </u>		<u> </u>	
1N4734	5.6	20 volt	1 watt :	zener die	ode
1N4735	6.2	CAT#	ZA20Z	10 for \$1.0	00
1N4737	7.5			000 for \$5	
1N4739	9.1	100 101 0	pr.00 1	000 101 40	,0.00

PHOTO-DIODES

Ledtech # LT4W55-2120-EA Black, side-looking photo diode.

CAT # PD-2 2 for \$ 1.30 • 50 for \$ 25.00

T 1 3/4 PHOTODIODE

Siemens # SFH2030F / SFH203FA. T 1 3/4 silicon PIN diode. Daylight filter (dark smoke) lens. Can be used as photodiode with reverse voltage or as photovoltaic cell.

CAT# PD-5 2 for \$1.30

100 for 50¢ each • 1000 for 40¢ each

SWITCHING DIODES

CAT#	PRICE	100	1000
1N914	15 for \$1.00	\$5.00	\$35.00
1N916	15 for \$1.00	\$5.00	\$35.00
1N4148	15 for \$1.00	\$5.00	\$35.00

FULL WAVE BRIDGE RECTIFIERS

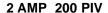
1 1/2 AMP 400 PIV

TO-5 case 3/8" dia. 3/16" high. GI# WO4M or equiv.

CAT# FWB-15 2 for \$1.00

2 AMP 100 PIV

CAT# FWB-201 3 for \$1.00 10 for \$3.00 100 for \$27.50



Leads on 0.15" centers.

CAT# FWB-202 65¢ ea. •10 for \$6.00

2 AMP 600 PIV

GI# 3N257.

Leads on 0.15" centers.

CAT# FWB-206 2 for \$1.00

100 for \$35.00

8 AMP 400 VOLT

Liteon # PBU-804. Leads on 0.2" centers. Special Purchase. Limited quantity

CAT # FWB-804 2 for \$1.20

100 for \$45.00

25 AMP BRIDGES

1 1/8" square.

50 P.I.V. CAT# FWB-250 \$1.75 each 200 P.I.V. **CAT# FWB-252** \$2.50 each 400 P.I.V. **CAT# FWB-254** \$3 00 each 600 P.I.V. CAT# FWB-256 \$3.50 each

35 AMP BRIDGES 1 1/8" square.

200 P.I.V. **CAT# FWB-352** \$2.50 each 10 for \$22.50 • 100 for \$175.00

400 P.I.V. **CAT# FWB-354** \$4.00 each **CAT# FWB-356** 600 P.I.V. \$4.50 each 800 P.I.V. **CAT# FWB-358** \$4.75 each

OPTO SENSORS

Clarostat # S-2216.

Slotted optical switch, 0.125" gap between emitter and sensor. Mounting flange has slots that accept centers from 0.30" to 0.75". Four 6" long wire leads terminate to 4 pin molex-type connector.

CAT# OSU-47 75¢ each

Telefunken # TCST 5123. 0.12" gap. 0.25" high.

CAT # OSU-37 2 for \$ 1.00

Tube of 60 for \$ 21.00

Optek # K1796-EP 0.13" gap. 0.75" mounting centers. 10" pigtail leads.

CAT # OSU-32 2 for \$1.00

Omron # EE-SX416

Surface-mount sensor assembly with 0.2" (5mm) gap. Mounted on a right-angle metal bracket, the sensor assembly, itself, is 0.79" x 1.18" x 0.62" high.

On-board three pin male header (0.1" centers).

CAT # OSU-40 \$1.00 each

OPTICAL SWITCH WITH INTERRUPT MECHANISM

Omron U-shaped opto-switch with a 0.2" gap. A springloaded plastic arm with a kind of flag at the end interrupts the switch beam. The

arm slides back and forth through a teflon channel. Assembly mounted on a metal bracket, 2.32" x 1.1."

CAT # OSU-45 \$ 1.20 each

REFLECTIVE OPTO SENSOR

Vactec # 21L900. Reflective opto sensor. 0.79" x 0.58" x 0.21". Four 7" leads with 4-pin connector

(0.1" centers). Removed from new equipment.

CAT# OSU-48 75¢ each • 100 for 55¢ each



















SOLAR PANELS & PHOTOVOLTAICS

9 VDC, 60 MA SOLAR CELL

These 6" X 6" glass enclosed photo-voltaic panels produce 9 Vdc at 60 mA. Ideal for charging batteries and powering small devices. Put two or more together for more current and voltage. Includes metal connectors and instructions for soldering. CAT# SPL-960 \$5.25 each



PHOTOVOLTAIC DETECTOR

Miniature silicon solar cell converts light impulses directly into electrical charges which can easily be amplified, using a transistor for example, to activate a control mechanism. Unlike a conventional photo diode or transistor, it generates its own power and does not require any external bias. Generates 0.4 vdc in moderate light. Silicon cell is mounted on a 0.31" x 0.23" x 0.07" thick plastic carrier and has pc leads on 0.2" centers. Large quantity available.

CAT # PVD-2 75¢ each 10 for \$6.50 • 100 for \$50.00

SOLAR CELL

Output: approximately 3 Volts @ 40 mA. 2.40" square x 0.13" thick epoxy-encapsulated silicon photovoltaic cell removed from solar lighting system. Solid, almost -unbreakable module with easy-to-solder spots on backside. Ideal for solar-powered battery chargers and other projects. CAT # SPL-60 \$3.50 ea. • 100 for \$3.00 ea.

Silicon photovoltaic cells.

Approximate output: 0.45 Volts @ 100 mA.

0.79" x 0.79" (20mm x 20mm) square. 0.01" thick. CAT # SPL-22 75¢ each • 10 for \$5.00

Approximate output: 0.45 Volts @ 50 mA 0.79" x 0.4" (20mm x 10mm). 0.01" thick. CAT# SPL-12 3 for \$1.00



SOLAR PANELS

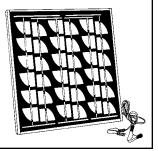
12 - 16 Volt solar arrays from Sun-Mate ® Corporation. Use for charging rechargeable batteries. Weather-proof housing with silicone sealed edge. Built-in blocking diode to prevent reverse current flow at night. Alligator clip leads. Manufacturers guarantee. Two sizes available:

12 Volt 120 mA 6" x 11" x 1" **CAT# SM-685** \$59.95 each



12 Volt 500 mA 14.35" x 15.35" x 1" **CAT# SM-500**

\$79.95 each



FLEXIBLE THIN FILM SOLAR PANELS

Very thin, extremely flexible polyester encapsulated photovoltaic modules suitable for indoor or protected outdoor use. Lightweight. Great for mounting on curved surfaces. Ideal for charging nickel cadmium and nickel metal hydride batteries or running low current applications. Can be connected in series or parallel for higher voltage or current. Modules have copper strips at each end to make solder connections.

CAT # SPL-314 \$4.50 each 3 Volts @ 19 mA 4.5" x 1.44"

CAT # SPL-328 \$8.50 each 3 Volts @ 38 mA 4.5" x 2.88"

FLEXIBLE THIN FILM 6 AND 12 VOLT CHARGERS

Flexible thin film polyester encapsulated solar modules designed to charge 6 and 12 volt nickel cadmium, nickel metal hydride or gel cell packs.

Can be mounted on curved surfaces. Designed for limited outdoor use. For full time, all-weather conditions CAT # SPL-675 is Tefzel®/EVA encapsulated for added protection.

7.2 Volts @ 100 mA 9.92" x 2.9" CAT # SPL-610 \$17.75 each

15.4 Volts @ 50 mA 9.92" x 2.9" CAT # SPL-1250 \$21.95 each

ALL-WEATHER FLEXIBLE THIN FILM **6 VOLT CHARGER**

Flexible thin film solar module designed to charge 6 Volt nickel cadmium, nickel metal hydride or gel cell packs. This is our CAT# SPL-610 module encapsulated in Tefzel®/EVA for weatherproofing. Flat copper leads extend outside of encapsulation to facilitate connection. Can be mounted on curved surfaces. 7.2 Volts @ 100 mA. 11.31" x 3.87". CAT # SPL-675

\$29.95 each

PHOTOCONDUCTIVE CELLS

Cadmium sulfide photoconductive cells. Plastic encapsulated, moisture-resistant package.

LIGHT - 35 OHMS, DARK - 5K OHMS 0.29" X 0.25" X 0.08". 1.5" wire leads. CAT# PRE-14 75¢ ea. • 10 / \$6.00 • 100 / \$50.00

LIGHT - 5 OHMS, DARK - 20K OHMS

Plastic encapsulated ceramic package. 0.44" x 0.40" x 0.04". 1.5" wire leads.

CAT # PRE-18 75¢ ea. • 10 / \$6.00 • 100 / \$50.00

JUMBO PHOTOCELL

20 OHMS - LIGHT, 5K OHMS - DARK 1" x 0.85" x 0.07" thick plastic encapsulated ceramic package.0.57" long leads on 0.75" centers. CAT # PRE-19 75¢ ea. • 10 / \$6.00

PHOTOCELL IN TO-5 HERMETIC PACKAGE

100 OHMS - LIGHT, 3 MEG - DARK 0.2" dia. x 0.15" hermetically-sealed TO-5 metal package with clear lens. 1.5" leads.

CAT # PRE-20 75¢ ea. • 10 / \$6.00

40 OHMS - LIGHT, 20K - DARK

0.16" x 0.14" plastic encapsulated ceramic package. 1.5" leads.

CAT # PRE-21 75¢ ea. • 10 / \$6.00

100 OHMS - LIGHT, 50K - DARK

0.16" x 0.14" plastic encapsulated ceramic package. 1.5" leads.

CAT # PRE-23 75¢ ea. • 10 / \$6.00

100 OHMS - LIGHT, 50K - DARK

0.27" x 0.24" plastic encapsulated ceramic package. 1.5" leads

CAT # PRE-22 75¢ ea. • 10 / \$6.00

BOOKS

ARRL HANDBOOK 2002 EDITION

The standard reference book for radio amateurs, electronics technicians and professional engineers. New material on digital signal processing (DSP) and wireless technology covering cell phones,



pagers etc. A large variety of hands-on projects including a new versatile compensated wide-range modular RF voltmeter, easy-to-build VHF receiver, universal power supply, and solar charge controller. 1200+ pgs.

CAT # ARRL-2002 \$34.95 each



THREE BOOKS ON THE TESLA INVENTIONS

Nikola Tesla, at the turn of the century, invented the alternating current system still in use today. He also invented the Tesla coil which can boost wall voltage to millions of high frequency volts.

TESLA, The Lost Inventions

describes in detail some of his more amazing inventions. 34 pages, 42 illustrations. Softbound.

CAT # TESLA-1 \$5.95

TESLA COIL, a 26 page booklet with all the facts to build a Tesla coil on any scale. Softbound **CAT# TESLA-2** \$4.95

RADIO TESLA, The Secret of Tesla's **Radio and Wireless Power**

"Oscillations of low frequency are ever so much more effective in transmission," said Tesla in 1919. This, and other aspects of Tesla's radio theories are documented in RADIO TESLA. 38 pages, 66 illustrations. Softbound. CAT # TESLA-3 \$6.50 each



Low-distortion front surface mirrors. Removed from equipment. Two sizes available:

12.5" x 2" x 0.4"

CAT # MIR-8 \$2.50 each

13.75" x 1" x 0.25"

CAT # MIR-9 \$2.00 each

LENSES & OPTICS

73 MM LENSES

73 mm (2.9") diameter plastic lenses, probably stock from an optician's supplies. They are clean and individually packaged. Some have small chips around the outer edge. Seven magnifications available. The positive numbers magnify, negative numbers make smaller. LNS-25 has dual characteristics.

CAT#	MAGNIFICATION	EACH
LNS-16	3.0	\$1.00
LNS-17	3.5	\$1.00
LNS-18	-3.50	\$1.00
LNS-19	-2.75	\$1.00
LNS-23	-3.75	\$1.00
LNS-24	-0.25	\$1.00
LNS-25	-4.25 and -1.00	\$1.00

20 mm DIAMETER GLASS MOUNTED POLARIZED FILTERS

Made by Polaroid for use in military binoculars, these filters are ideal for experimentation, education and optical projects. Optically ground glass, 20 mm diameter X 2 mm thick. Notched. 20% transmission.

CAT# PF-1 \$1.00 each Box of 40 - \$30.00

U.S. Precision Lens, Inc., Delta 67 ®

Assembly consists of one 2.9" dia. glass, convex-convex lens and two plastic lenses, 3.3" and 2.66" at front and rear. Outer housing is 4.58" dia. x 2.3" high. Focal

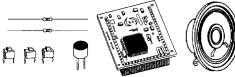
length adjusts by way of a wingnut on the side of the lens.

CAT # LNS-67 \$ 5.50 each

1.5" CONVEX LENS

U.S. Precision # 7799-00-001 1.5" diameter x 0.4" thick (max) acrylic lens. CAT # LNS-14 \$ 1.00 each

Voice Direct 364 ™ Speech Recognition Kit



This kit enables you to add voice recognition to toys, motors, appliances, lights and games. It can be trained to recognize up to 60 words or phrases lasting up to 2.5 seconds each. "Continuous Listening" technology allows it to be programmed to recognize three words or phrases within an ongoing monologue. The Voice Direct™ module is very selective, in that it responds only to the voice that programs it. Module size is 2" square. Operates on 4.5 - 5.2 Vdc Kit includes the Voice Direct module, a speaker, microphone, LED, resistors and pushbutton switches. Not included, but recommended: A 5 Vdc 100 mA power supply or 3 AA batteries and a battery holder, 3" x 3" proto or perf board, 0.1" male headers (17, 19 and 14 pins), hookup wire and some LEDs to monitor outputs. CAT # SKR-364 \$49.95 each

KITS

A NOTE ABOUT KITS....

Kits cannot be returned or exchanged once assembly has begun. All parts supplied EXCEPT batteries. Some kits require permission of parties involved before use.

ADJUSTABLE LED FLASHER

Two potentiometers adjust the flash rate of two LEDs. 9V operation. Battery not included.

CAT #MK-1021 \$4.95 each



WATER ALARM

Buzzer sounds when water is detected. Water sensor can be placed at a distance by cutting the board and using wires to connect the sensor. 9V operation.

Battery not included.

CAT # MK-108 \$ 7.95 each



L.E.D. FLASHER KIT

Two L.E.D.'s flash in unison when a 9 volt battery is attached. This kit includes a p.c. board, all the parts and instructions to make a simple flasher circuit. A quick and easy project for anyone with basic soldering skills.

CAT# LEDKIT \$1.75 per kit

LED CHASER KIT

Build this variable speed led chaser. 10 leds flash sequentially at whatever speed you set them for. Easy to build kit includes pc board, parts and instructions. Ideal for special lighting effects, costumes, etc. Operates on 3 to 9 volts. PC board is 5" X 2.25".

CAT# AEC \$6.50 each

10 for \$62.50 • 100 for \$600.00

STROBE KIT

Variable rate strobe kit, flashes between every 2 or 3 seconds. Our kit will operate on either 12 Vdc or 4.5 to 6 Vdc depending upon how you decide to wire the circuit. Comes complete with P.C. board and full instructions for easy assembly. CAT# STROBE-1 \$7.50 each

DC TO PULSE WIDTH CONVERTER

Velleman # K8004.
Ideal for the accurate
control of DC motors, lighting
levels and small heaters as well as
other applications. The circuit converts
DC voltage into a series of pulses, the duration of
which is directly proportional to the voltage.
Minimizes power loss in the control circuit. Overload
and short circuit protection. Input Voltage: 2.5 - 35
VDC. Maximum output 8-35 Vdc, 6.5 Amps.

CAT # MK-804 \$22.95 each

UNIVERSAL BATTERY CHARGER / DISCHARGER KIT FOR NICKEL CAD AND NICKEL METAL HYDRIDE

Velleman # K7300. Versatile kit allows charging of NiCad and NiMH batteries of different voltages and capacities. Settings for

rapid and normal charge rates.

Also has a feature that discharges the batteries before charging to get maximum life out of the cells. Selectable charge current from 15 mA to 750 mA. Charges cells of 1.2, 2.8, 3.6, 4.8, 6, 7.2, 8.4 and 9 Volts. Requires a 15 vdc, 800 mA power supply/ wall adapter.

CAT # MK-173 \$ 24.95 each

INTERVAL TIMER KIT

Velleman # MK111. For intermittent operation of circuits and equipment. Use for blinking light control, slide projector control etc. Pulse time adjustable between 0.5 and 5 seconds. Pause time adjustable between 2.5 and 60 seconds. 3 Amp output relay. Power supply 12-15 Vdc @ 100 mA (not included).

CAT # MK-111 \$ 9.95 each

METAL DETECTOR

Ideal for locating metal pipes and objects in walls or ceilings. An LED indicates if a metal object is in the vicinity. If an audible signal is desired, space is provided for a buzzer. Operates on 9 Volt battery (not included).

CAT # MK-7102 \$12.99 each

I.R. RECEIVER MODULE (with timer)

When a signal is received from an infrared transmitter, this module will turn on a device (3-6 Vdc @ 0.5 amps) for 10 to 30 seconds. Can be activated with I.R. remote control from TV or VCR or make your own transmitter (see EM-111) below. Use with sound modules, toys and models. Requires 2 AA batteries. **CAT# EM-108** \$6.00 each

I.R. TRANSMITTER MODULE

Build this transmitter to use with the IR receiver module EM-108 above. Requires 2 AA batteries. **CAT# EM-111** \$3.50 each

DC MOTOR SPEED CONTROL KIT

Easy to build kit allows you to control the speed and direction of 6-12 vdc electric motors or control the intensity of 6-12v incandescent lamps. Includes pc

board, parts, instructions and dc motor.

CAT# MSC-6 \$15.00 each

MOTOR SPEED CONTROL MODULE

For 3-6 Vdc motors @ 0.5 amps. Features a pulse width modulation design that can vary motor speed from 5% to 95% with little loss of power. Use with any 3-6 Vdc power source.

Does not include batteries or motor.

CAT# EM-114 \$3.50 each

STEREO PRE-AMP KIT

Low-noise stereo pre-amplifier. Boosts input signal in audio applications. 1K ohm input impedance. Frequency range 40Hz-30Khz(-3dB). Adjustable gain, 40 dB max. PCB dimensions: 1.7" x 2.6." Requires 10-30VDC/ 5 mA power supply (not-included).

CAT # MK-2572 \$ 17.50 each

TRAIN SOUNDS KIT

Produces 4 kinds of train sounds: approaching and departing station, diesel and steam train. With a size of only 0.78" X 0.78" X 2", it can be installed in various model trains. Includes speaker and battery holder. Requires 2 AA batteries

CAT# EM-105 \$6.95 each

FLASHING LEDS WITH MUSIC

When triggered, 7 leds flash randomly for a few seconds. When they stop a beeping sound is heard for a few seconds. If the leds stop on LED number seven, a piece of music is played for a few seconds. Can be used as part of a game or a flashing badge. Operates on two AA batteries (not included).

CAT# EM-103 \$4.75 each

SOUND OPERATED CONTROL with TIMER

Clapping hands or other sharp noise is picked up by electret microphone and used to trigger a switch which can be used to turn on a light, motor or audio device. Shuts off automatically after 15 to 30 seconds. Operates on two AA batteries (not included).

CAT# EM-106 \$4.75 each

LIGHT RECEIVER with TIMER

Photodiode senses changes in ambient light and triggers a switch which can be used to control a light, buzzer or motor operating on up to 3 Vdc at 0.5 Amps. Resets itself automatically after 10 to 30 seconds. Operates on two AA batteries (not included).

CAT# EM-107 \$4.75 each

RUNNING MICROBUG

Velleman# MK-127 Bug-shaped miniature robot. Driven by two miniature motors, its photocell sensors seek light. Stops in total darkness. LED eyes



Operates on two AAA cells (not included).

\$14.95 each CAT # MK-127

CRAWLING MICROBUG

Velleman# MK-129 Two-speed miniature robot. Driven by two miniature motors, its photocell sensors seek light. Stops in total darkness LED eyes indicate driving direction. 4.5" x 3.43."

Operates on two AAA cells (not included).

CAT # MK-129 \$19.95 each

SOLDERLESS KITS FOR KIDS..

WALKING DINOSAUR KIT

This dinosaur walks, wiggles its head and tail and blinks its LED eyes. May require adult supervision, since it has a lot of parts including a motor and gears. It's fun to watch and can be painted to suit your taste. Operates on 2 AA cells (not included). CAT # MK-103 \$ 9.95 each

BIG WHEEL RACER KIT

Easy to build racer kit provides hours of enjoyment. The car is over 6" long and is designed to be assembled without soldering. The front and rear wheels have rubber tires. It can go

straight or in circles. The small DC motor is powered by two AA batteries (not included).

CAT # MK-102 \$6.95 each

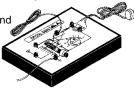
An excellent educational toy, the following radio kit makes a great gift for children ages 8 and older. Built on a plastic breadboard, they don't require soldering and are fun to listen to.

CRYSTAL RADIO KIT

How long has it been since you've seen a crystal radio?

Amaze your children and yourself with this easy to build kit, the first form of modern radio.

CAT# SK-103 \$5.95 each



BUILD YOUR OWN BATTERY OPERATED WOODEN MODEL

These complete kits come with pre-cut wooden parts, assembled gear unit, motor and complete illustrated instructions. Specially designed for children to build, these kits require the most basic electronic tools and two AA batteries (not included). Adult supervision recommended. Four kits available:



TRICERATOPS CAT# SM-802 \$10.95 each



ROBOT **CAT# SM-803** \$10.95 each

ELEPHANT CAT# SM-800 \$10.95 each



RACE CAR CAT# SM-804 \$10.95 each

FERRITES

FERRITE BEADS

0.5" long x 0.5" o.d. x 0.31" i.d. CAT # FB-35 \$1.00 each

1.13" long x 0.75" o.d. x 0.43" i.d. CAT # FB-44 \$1.00 each

0.5" long x 1" o.d. x 0.47" i.d. CAT # FB-45 \$ 1.00 each

0.54" long x 0.56" o.d. x 0.24" i.d. CAT # FB-49 \$1.00 each

1.15" long x 0.74" o.d. x 0.4" i.d. CAT # FB-50 \$1.00 each





FERRITE SPLIT BEADS WITH SNAP SLEEVES

Ferrite split beads are used to suppress RFI, EMI and unwanted spurious signals. Easy to install. Self-locking plastic snap sleeve holds ferrite form in place.

0.2" I.D. 0.50" o.d. x 1" long. CAT # FB-28 \$ 1.25 each

0.25" I.D. Outer case size: 0.73" X 0.73" X 1.28" CAT # FB-40 \$ 2.00 each

Plastic snap-sleeve is 0.7" long x 0.92" wide.

CAT # FB-48 \$1.25 each

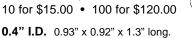
0.34" I.D. Ferrite snap-bead prepped with several feet of wire looped through it. The wire is easily removed. Outer dimensions. 1.38" long x 0.79" O.D.

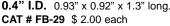
CAT # FB-37 \$1.50 each 10 for \$13.50 • 100 for \$100.00

0.36" I.D.

0.66" long x 0.87" O.D. **CAT # FB-46** \$1.75 each

10 for \$15.00 • 100 for \$120.00







FFRRITE BOBBIN COILS

1		DOL	
mh	CAT#	each	
1	FBC-1	2.35	
2	FBC-2	3.00	
3.5	FBC-3.5	3.60	
4.5	FBC 4.5	4.20	
5.5	FBC-5.5	5.25	
6.5	FBC-6.5	6.30	
7.5	FBC-7.5	7.50	
9	FBC-9	8.85	

For speaker crossovers

INDUCTORS

0.676 MICRO HENRY ADJUSTABLE **CHOKE** 0.375" X 0.375" X 0.75" high coil with adjustable ferrite. PC leads on 0.38" (10mm) centers. CAT# RC-676 3 for \$1.00 100 for \$25.00

3.9 MICROHENRY COIL

J.W. Miller # 4608 3.9 uH, 1000 mA axial inductor. 0.21" diameter x 0.75" long with 1.5" leads. CAT# CA-4608 \$ 1.00 each 10 for \$ 8.50 • 100 for \$ 75.00

46 MICROHENRY, 2 AMP

TDK# SF-T8-40SM. 46 uH, 2 amp toroidal inductor. 0.67" dia. X 0.35" thick. Coated exterior. CAT# CC-462 75¢ each • 100 for \$50.00

220 MICROHENRY DRUM CHOKE

Coilcraft # TV1363-B. 220 uH 5% @ 100 KHz 0.1 V 0 ADC. 0.4 ohm DC resistance. 0.32" dia. x 0.59" high radial choke. Leads on 5 mm centers. Tape and reel packaging. CAT # CR-220 4 for \$ 1.00

100 for \$ 20.00 • 1000 for \$ 100.00

CURRENT SENSING INDUCTORS

Encapsulated current sensing coil designed for use at 1KHz to 100 KHz. The conductor carrying the current to be measured is the "one turn primary" and passes through the center hole. The 200 turn, 80 mH secondary is the sensor and can read currents as high as 35 Amps with a sensitivity of 10mA to 1 Amp per volt depending on the resistance of the terminating resistor (200 ohms nom.). Sensitivity can be doubled by looping through the center hole twice. Applications include overload sensing, detecting load drop or shutdown, switching feedback control. Also useful in low frequency LC filters and tank circuits. PC pins on 0.5" centers. Spec. sheet included.

Falco # CS200 P/N TS50009

0.65" x 0.38" x 0.76" high.

CAT # VT-3

\$1.25 each • 100 for 75¢ each

Pulse# PE-51688

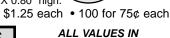
0.65" x 0.36" x 0.77" high.

CAT # VT-2 \$1.25 each • 100 for 75¢ each

Vitec# 57P1820

CHOKES

0.67" X 0.375" X 0.80" high. CAT# VT-4



REDUCED PRICE!

REDUCED

PRICE!

REDUCED

PRICE!

MICRO-HENRYS (uH) Cat# Price <u>Value</u> (NEW) 3 for \$1.00 CC-1 CC-202 2.2 3 for \$1.00 10 CC-10 3 for \$1.00 3 for \$1.00 12 CC-12 15 CC-15 3 for \$1.00 390 CC-390 3 for \$1.00 CC-1000 1000 2 for \$1.00

4.0 mH HIGH CURRENT CHOKE

ACTUAL CURRENT RATING UNKNOWN 2.25" X 1.93" X 1.48"

CAT # CA-401

\$5.00 each



A.C POWER CORDS

2 CONDUCTOR

9' POWER CORD w/ "PIGGY-BACK" PLUG

Electricord. 3 conductor SPT-3, 18/3 black cord with 2 conductor plug. Right-

angle piggy-back plug. 9' cord has a molded strain

relief 6" from end. Tinned pigtail leads.

CAT# LCAC-98 \$1.00 ea. • 100 for 75¢ ea.

ROUND - 3 CONDUCTOR



3' BEIGE, 14/3 SJT, 14/3 power cord with stripped pigtail ends. 0.37" nom. O.D. UL, CSA. CAT # LCAC-94 \$ 1.25 each Case of 125 pcs 95¢ each

4' GRAY/ BEIGE, 14/3 SJT, 14/3 light-gray or beige jacket. 48" long. Hanked. UL, CSA. CAT# LCAC-91 \$1.50 ea. • 100 for \$120.00

6' BLACK, 16/3

SJT, 16/3 cord w/ stripped pigtail ends. Black, 0.32" nominal o.d., 105 deg C. UL, CSA. CAT # LCAC-108 \$2.00 each Case of 50 pieces for \$1.75 per piece

25' GRAY 18/3 Molded 3 prong grounded plug. 18/3, SJT, 105 deg.C insulation.

CAT# LCAC-25 \$4.50 each

DETACHABLE POWER CORDS





Standard IEC (SPH-386) power cord. IEC female connector one end, standard 3 prong grounded a.c. plug other end.

5' GRAY 18/3

SVT, shielded cable. 0.27" nominal o.d. UL, CSA. CAT # LCAC-92 \$ 2.50 each

6' BLACK 18/3

SVT, 0.26" nominal o.d. UL, CSA. CAT# LCAC-60 \$3.00 each 10 for \$25.00 • 100 for \$175.00

6' GRAY 18/3

SVT, 0.26" nominal O.D. UL CSA 10A CAT# LCAC-71 \$ 3.00 each 10 for \$ 25.00 • 100 for \$ 175.00

10' GRAY 18/3

SJT, 0.33" nominal o.d. Shielded. UL,CSA. CAT# LCAC-88 \$3.25 each 10 for \$27.50 • 100 for \$200.00

8' CORD WITH LOCKING END

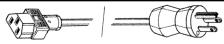
Electricord. Black, 18/3 SVT power cord. Female end is a Sure-Lock™ connector with locking tabs. 0.25" dia. UL, CSA. CAT# LCAC-109 \$3.00 each ()

HEAVY-DUTY

6' 14/3 detachable power supply cord. Black SJT insulation. 0.37" diameter. UL, CSA.

CAT # LCAC-90 \$ 3.25 each

HOSPITAL GRADE CORDS



6' GRAY 18/3 SJT, 105 deg C. 0.31" o.d. Semiclear molded plug and socket. UL, CSA. CAT # LCAC-105 \$ 4.25 each

6' GRAY 18/3, SJT, 105 deg C. 0.31" o.d. Gray molded plug and right-angle socket. UL, CSA. CAT # LCAC-107 \$ 4.25 each

DETACHABLE CORDS WITH STRAIGHT BLADE (IEC320) ENDS



Black 14/3 SJT power cords. Standard male 3 prong grounded plug on one end. 3 conductor straight blade, IEC 320, female connector molded on other end. 0.38" diameter. UL.

5 1/2 FOOT CORD

CAT # LCAC-102 \$3.75 each 10 for \$ 3.50 each • 100 for \$3.00 each

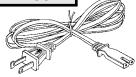
14 FOOT CORD

CAT # LCAC-101 \$ 5.75 each 10 for \$ 5.25 each • 100 for \$4.50 each

2 CONDUCTOR **UNIVERSAL POWER CORD**

Fits many laptop and video game power supplies.

CAT # LCAC-100 \$ 2.00 each



6' FLAT - 3 CONDUCTOR



Woods Electric # 464 6 foot 16/3, SPT-3 gray power cord. Molded

3 prong plug. Rated 13 Amps /125 volt. UL. CAT# LCAC-84 \$1.50 ea. • 10 for \$1.25 ea.

STRAIN RELIEFS

Prevent power cords from pulling, pushing, or twisting in chassis hole. CAT# WIRE TYPE HEYCO# HOLE or equiv. SIZE PRICE

SR-40 flat 18/2 SPT-1 4P-4 .45" 10/ \$1.00 SR-60 flat 18/2 SPT-2 4N-4 .50" 10/ \$1.00 SR-50 18/2, 18/3, SV,

SVT round 51 -1 .50" 10/ \$1.00

SR-18 round, 0.2" diameter cable 5P3-4 0.5" 10/ \$1.00

round, 0.26" diameter cable SR-19 6W-1 0.5" 10/ \$1.00

SR-70 18/2, 18/3, 16/2, 6/3 SV, SVT, SJO round .65" 10/ \$1.50 6N-4

SR-80 18/3, 16/3, SJ, SJT, SJO round 6N3-4 .625" 10/ \$1.50

SR-16 SJT 12/3 0.425" to 0.475" dia cable 31-2 0.875" 5/\$1.00

SR-34 flat up to 0.29" X 0.65"

SR34-2 0.875" 2/\$1.00

IN-LINE THUMBWHEEL SWITCH FOR SPT-2 CORD

S.P.S.T. on-off thumbwheel switch for two conductor SPT-2 power cords. Rated 6 Amps @ 125 Vac. To install, cut a small piece out of one side of a two conductor cord and screw together the two halves of the switch. Prongs puncture insulation and make the connection. UL, CSA.

CAT# SWT-1 \$1.25 each

PLAGS

3 PRONG AC PLUG

Leviton # 515PR. Black 15 Amp grounding 3-wire AC plug. Rubber body is dirt and moisture resistant. Tough elastomeric husk. Built-in cord grip adjusts to 0.245" to 0.655" cords, 18-3 to 12-3. UL, CSA. CAT# ACP-8 \$2.50 each • 10 for \$1.85 each

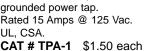
AC PLUG ADAPTER

RATED: 125 Vac @ 15 amps. Turns 3-prong AC plugs into a 2-prong, polarized plug. CAT# ACP-2 2 for \$1.00



15 AMP 3-WAY POWER TAP

Woods Electric # FF-148 Hard rubber, 3-way grounded power tap. Rated 15 Amps @ 125 Vac. UL, CSA.





.**C**. SOCKETS

15 AMP GROUNDED OUTLET

Leviton # 1374-500. Black 3 conductor grounded outlet. Rated 15 Amps. Snap-mounts in 0.953" square chassis cutout. : Quick-connect / solder connectors with 6" green ground lead, AWG 16. UL, CSA. CAT# ACS-28 \$1.20 ea. • 100 for 95¢ ea.

15 AMP GROUNDED OUTLET

Kulka Electric. Black, threeconductor outlet. Snap-mounts in 1" square cutout. Rated 15 Amps @ 125Vac. 6" pigtail leads, AWG 16 stranded wire. UL, CSA.

CAT# ACS-31 \$1.20 each • 100 for 95¢ ea.

3-PRONG GROUNDED SOCKET

Leviton # 114. Heavy-duty 3 prong socket for AC power cords. For 0.396" to 0.562" diameter cords. 18-14 AWG stranded conductors. Rubber ized shell resists chemicals and remains flexible even in low temperatures. UL, CSA. CAT # ACS-27 \$3.50 ea. • 10 for \$3.15 ea.

IEC (SPH-386) SOCKETS

Recessed power receptacle mates with any cord having the SPH-386 connector. Tough molded black plastic. 1 9/16" mounting centers. CAT# ACS-3 65¢ each 10 for \$5.50 • 100 for \$35.00



RFI/EMI FILTERS

3 AMP EMI FILTER

Power Dynamics, Inc. #PB03F Compatible with IEC power cords. Mounting holes on 1.5" centers. Extends 2" behind mounting panel. 0.25" qc or solder terminals. UL, CSA, VDE.

CAT# EMI-31 \$1.25 each • 100 for \$75.00

6 AMP RFI/EMI FILTER

CDE # APF600CET 1.18" x 0.8" x 1.63". Right angle terminals. CAT # EMI-62 \$1.50 each 10 for \$ 12.00 • 100 for \$ 85.00

SURGE PROTECTOR

Protect computers, phone equipment, VCRs and other sensitive devices from electrical transients and glitches.

1290 JOULE SURGE SUPPRESSOR

Newpoint # 1002. Six outlet strip with two spaced outlets to allow use of transformers without blocking other outlets. Protects computers, audio/video equipment, fax machines, modems and other small devices from voltage surges caused by lightening or power fluctuations. Also has EMI/ RFI noise reduction. Automatic shutdown when surge protection has reached capacity. Power switch with integrated circuit breaker. Protection indicator light. Modular phone jacks with surge and EMI/RFI protection as well. 6' power cord. Includes 6' modular phone cord.

CAT# PW-1290 \$12.00 each



EXTENSION CORDS

7' EXTENSION CORD W/ FLAT PLUG

RCA # E1007W. 7' white, 16 gauge extension cord with right-angle plug to allow easy fit behind furniture. Two conductor, SPT-2 cord. Three tap outlet.

CAT# EXT-70 \$1.50 each

10' 16/2 EXTENSION CORD. 3 OUTLET END

Woods Electric # 5606. 10' gray, 2-conductor, 16 gauge extension cord. SPT-2 insulation.

UL listed. CAT# EXT-10G \$1.65 each

EXTENSION CORD WITH ROTATING PLUG

This 1 foot heavy-duty extension cord is great for gaining access to hard-to-reach outlets. The plug rotates 360 degrees, so the socket end of the cord can be reached from above or either side. Grounded, three-prong plug and socket. 14/3 gray SJT cable.

CAT# EXT-1 \$2.50 each



PHOTOCELL CONTROLLER

Hemco # SLC4CG. 150 Watts. Automatically turns lights on at dusk, off at dawn. For 115vac use, incandescent lamps only. Blister packaged with instructions. UL, CSA. CAT# APC-4 \$2.50 each



TOUCH LAMP DIMMER

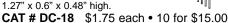
Turn lamps on and off, brighten and dim with a touch of your finger.

Touch-controlled lamp dimmer screws into most table and floor lamps and instantly converts them to four-level dimmers. Works on incandescent lamps up to 150 Watts. Lamp must have a metal base or pole connected to the lamp socket. Outer metallic surface of lamp socket must be exposed so dimmer can make proper contact. UL.

CAT# DS-4 \$2.00 each

9 VDC. 250 MA

PCA Electronics # EPC1053 Input: 7.5 - 16 Vdc Output: 9 Vdc @ 250 mA (max) 1.27" x 0.6" x 0.48" high.



DC - DC CONVERTERS

DC-DC CONVERTER

TDK # CE-0381 Input: 5 Vdc Outputs: -10 Vdc, -19 Vdc, -26 Vdc, and 6 Vac w/ center tap. 1.23" x 0.9". Includes hook-up diagram.

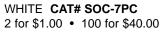
CAT # DC-32 2 for \$1.00 • 100 for \$25.00

5 VDC to 9 VDC (unregulated)

Valor # PM6045 1.3" x 0.8" x 0.45" high. Provides 9 VDC @ 250 mA. Requires about 100 mA load minimum. CAT # DC-43 \$1.50 each

TUBE SOCKETS

PC mount socket for round base 7 pin relays and vacuum tubes.



BLACK **CAT# SOC-7PCB** 2 for \$1.00 • 100 for \$40.00



PC mount socket for round base 8 pin relays and vacuum tubes.

CAT# OCT-PC 85¢ each 10 for \$8.00 • 100 for \$75.00



Solder style 9 pin tube socket. **CAT# SOC-9M**

2 for \$1.00 • 100 for \$40.00

PC mount 9 pin tube socket.

CAT# SOC-9MPC
2 for \$1.00 • 100 for \$40.00





PARALLAX BASIC STAMP COMPUTERS

BASIC Stamps are general purpose I/O computers programmed in PBASIC, a variation of BASIC. Perfect for small control applications. Thousands are in use by hobbyists and professionals throughout the world. Each module has on board EPROM program memory, BASIC interpreter, 5 V regulator and a power reset circuit. Free technical support is available from Parallax by phone or internet http: www.parallaxinc.com

STARTER KIT

If you haven't used BASIC stamps before you should begin with one of these packages. They contain everything you need to utilize a BASIC stamp in your application. Included is the BS-1, BS-2 or BS-2SX module, carrier board and a Programming Kit (list price \$84.95) consisting of software disc, serial cable and a 454 page manual with examples, application notes and code conversion tips. The software requires DOS 2.0+ and a parallel port.

	•	
CAT#	DESCRIPTION	Each
27205	BS-1 Starter kit	\$ 109.00
27203	BS-2 Starter kit	\$ 149.00
27206	BS-2SX Starter kit	\$ 159.00

INDIVIDUAL BASIC STAMPS, CARRIER AND ACTIVITY BOARDS

BASIC stamps come in three configurations:

The BS1-IC has 8 I/O lines, program storage for 80 BASIC instructions, 4 MHz operation and comes in a 14 pin SIP package. CAT # BS-1 \$ 34.00 each

CARRIER BOARD FOR BS-1 CAT # 27110 \$ 15.00 each



The BS2-IC has 16 I/O lines, program storage for 600 BASIC instructions, 20 MHz operation and comes in a 24 pin DIP package.

CAT # BS-2 \$ 49.00 each

The BS2SX-IC

A more powerful version

of BS2 with 2.5 x more speed (50 Mhz), 8x more code space and 63 more bytes of RAM Pin and downward code compatible with the BS2 module with the exception of timing parameters. 24 pin DIP package.

CAT# BS-2SX \$59.00 each

CARRIER BOARD FOR BS-2 and BS2-SX CAT # 27120 \$ 20.00 each

BOARD OF EDUCATION

Designed as part of an educational "Stamps in Class" program, the "Board of Education" is a useful development platform for the BS-2 and BS-2SX chips. 3" x 4" overall size. Features include: DB-9 connector for programming and serial communication during run time. P0-P15 I/O pins, Vdd and Vss connections adjacent to the breadboard. Includes 10 color-coded 22 gauge wires for wiring to bread board. Connector for optional AppMods (more breadboard space). Onboard 9 Volt battery clips, or use with wall transformer. CAT # 28150 \$ 59.00 each

2 X 16 SERIAL LCD

Scott Edwards Electronics Useful if your BASIC stamp project needs to interact with a human user. Requires only



one I/O line, +5 Volts DC and ground, and are controlled with simple SEROUT instructions from the BASIC stamp. **CAT # 27910** \$49.00 each

CELL PHONE ACCESSORIES

"HANDS-FREE" HEADSETS

Allows for hands-free operation while driving or walking. Earpiece fits in ear while microphone hangs next to your mouth. Makes your drive time safer and more comfortable.

Nokia 5100/6100 Models - Pushbutton on microphone to answer and end calls.

CAT # NOK-2 \$6.95 each

Nokia 8200/3300 CAT# NOK-10 \$6.95 each

Motorola Star-Tac, Samsung 6100 and some other cell phones with a jack for a 2.5mm stereo phone plug. **CAT # MT-2** \$6.95 each

NOKIA 5100/6100
Padded Headset
If you find the in-the-ear type
headset uncomfortable,
this may be your salvation.
The earpiece sits outside of your
ear, held in place by a strap that
goes over your ear.
CAT# NOK-9 \$7.95 each



This "hands-free" headset puts the earpiece outside of your ear and has a boom-mike to get the mike closer to your mouth. Works with Motorola Star-Tac, Samsung and other cell phones as well as some cordless phones and computers. Beige headset and 5' cord with right-angle 2.5mm stereo mini phone plug.

CAT # PHN-21 \$ 4.95 each

BATTERY CHARGERS

NOKIA CHARGER FOR 5100/6100/8200/3300/8800

For most current model Nokia cell phones, models 5100 series, 6100 series, 8200, series, 8800 series, 3300 series. Allows you to power your cell phone and charge the batteries wherever an AC outlet is available.



CAT# NOK-11 \$7.95 each

CIGARETTE LIGHTER/ WALL CHARGER

Use your automobile cigarette lighter power cord to charge or operate cell phones, laptops, and audio equipment at home or in a hotel. If you don't have, your "in-home" charger, but still have the automobile charger, this wall transformer will work for most loads, up to one amp. Works with all car lighter cords that would normally work on 13.6 V automobile voltage.

CAT# DCTX-1286 \$9.95 each

CAR CHARGER

Plugs into car cigarette lighter or accessory socket. Charges most batteries in an hour or less.



Nokia 3300/5100/6100/8200 and 8260

CAT # NOK-1 \$ 4.95 each

Motorola Star-Tac
CAT # MT-1 \$ 4.95 each

Motorola V60, V6 6, I20 and Nextel I85, I50, I80 CAT# MT-4 \$4.95 each

BATTERIES

LOW, LOW PRICE! NOKIA 5100/6100 CELL PHONE BATTERY

Standard battery for all Nokia 5100 and 6100 series cell phones.
3.6 Volt, 900 mAh nickel metal hydride pack good for 3-5 hours talk time,

60-270 hours standby time. These are new batteries with minor cosmetic blemishes, that do not impair the battery's usefulness in any way. Ideal replacement or spare battery.

CAT# NOK-8 \$6.95 each

NOKIA 5100/ 6100 LITHIUM-ION BATTERY WITH VIBRATOR

Provides 1000 mAH of storage capacity, twice that of the standard Ni-cad battery that comes with the phone. Also contains a minivibrator allowing you to shut-off the ringer and still be aware of incoming calls.

CAT # NOK-5 \$ 19.95 each

CLIPS AND CASES

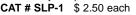
NOKIA GENUINE LEATHER CASE

For 5100 and 6100 series. Protects phone and provides a belt clip. Also includes detachable wrist strap.

CAT# NOK-6 \$4.95 each

SWIVEL CLIP

Small knob attaches to back of phone which then slides into spring clip.
Allows you to clip phone to belt or visor. Comes with two knobs; one fits Nokia 5100/ 6100 phones, the other has double-sided tape for attachment to any cell phone or other device.



MAGNETIC CELLPHONE HOLDER

A convenient cellphone holder for automobile dashboard.
Compact magnet /clip attaches to any flat surface using extremely strong adhesive sticker. Provides a hanger for cellphone carrying case.

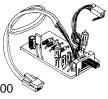


a hanger for cellphone carrying case or swivel clip, or attach phone directly to magnet using adhesive-backed metal plates included with holder. Powerful 7500 gauss magnet securely holds phone in place.

CAT # MLP-1 \$ 3.75 each

PC BOARD W/ LEDS & NEONS

Unidentified assembly, possibly for telephone application, with two NE-2, neon lamps, a rectangular LED, a switch and a phone cord. **CAT # EX-70** 5 for \$1.00 • 100 for \$10.00



PRESSURE-LIMIT SAFETY VALVE

Take the guesswork out of inflating bicycle tires. Screws on to the tire valve stem, and stops filling tire when preset pressure limit has been reached. Eliminates need for tire gauge. Four tire pressures available:

For 40 psi tires
For 65 psi tires
For 90 psi tires
For 100 psi tires
For 100 psi tires
For 100 psi tires

CAT# PLV-40
Set of 2 for \$1.00
CAT# PLV-90
Set of 2 for \$1.00
Set of 2 for \$1.00
Set of 2 for \$1.00

MAGNETIC CARD READERS

Used credit card magnetic strip reader and telephone cradle mounted on a metal box. Originally part of a mobile pay phone system. Strip reader is 4" x 1.65" x 1.1." Box is 4.5" x 4" x 1.45." Phone not included.

CAT # MSR-2 \$ 3.00 each

Peripheral Dynamics # 3807-20. Card reader mechanism with 8 digit LED readout

with 8 digit LED readout and related circuitry. Mounted in a 5.38" x 4.25" x 3" metal case. Used, removed from Bally gaming machines.

CAT# MCR-6 \$3.50 each



MEDIA STORAGE

MODULAR CD RACKS

Organize your CDs or CD ROMs with these high-impact, black plastic CD storage racks. Slots for 12 jewel cases. Each 12 CD module can interlock vertically and horizontally with other modules. Can be free standing or wall mounted.

CAT # CDR-3 \$2.00 each • 10 for \$17.50

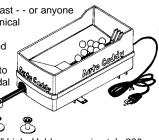
MULTI-MEDIA RACK

Desktop flip rack keeps all of your important media in one place. CD's 3.5" floppies and ZIP discs all can be stored in the same rack. Outer rails hold 16 CD/CD ROMs. Inner rails hold 20 3.5" floppy discs, or 3 ZIP discs and two M.O. discs. Attractive retail packaging.

CAT# CDB-18M \$1.75 each • 10 for \$15.00

AUTO CADDY™ AUTOMATIC TEE MACHINE

For the golf enthusiast - - or anyone in need of a mechanical extension arm. An electrically controlled arm extends and drops a golf ball onto a tee when foot pedal is depressed. Unbreakable plastic hopper.



18.75" x 10.5" x 9.5" high. Holds approximately 200 balls. Designed for use with "astroturf-style" mat to support standard rubber driving range tees. Dual motor mechanism may be useful for other applications. Arm with ball holding ring extends 8.5". When it reaches full extension it retracts a metal rod allowing the ball to drop. The arm then goes back inside the hopper. Operates on 120 Vac. 6 foot grounded power cord. Includes six rubber tees, height adjustment knob and hardware for foot pedal and mounting feet. Does not include driving mat.

CAT # CDY-1 \$ 20.00 each

NINTENDO GAME BOY™ AMPLIFIER

Nuby # GC-7. Turn up your "Game-Boy." Hear the game the way it's meant to be, in stereo, comfortable, but not too loud. Plugs directly into the audio jack. Designed to fit older "Game-Boys." Works with the new models, but is larger than the game and doesn't fit perfectly. Requires 9V battery or 9V wall transformer (not included)

CAT # NGA-7 \$1.85 each

COUNTDOWN CLOCK

This fully functional assembly from an unusual "LifeClock" countdown clock. Based on information you program into it, the "LifeClock" displays the estimated remainder of your life in hours, minutes, seconds and tenths of seconds.

The clock also flashes an inspirational message every minute and the actual time. Can be programmed to countdown shorter intervals by inputting a fictitious birthdate. Information is displayed on a backlit 2 x 16 LCD, 2.75" x 1.06". The whole assembly is on a triangular plastic base, 4.38" x 11.5" long and 2.7" high. Includes hook-up/ instruction sheet. Requires a 6 - 7.5 Vdc wall transformer (not included).

CAT # CDC-1 \$7.50 each

Recommended power supply:

CAT # DCTX-6570 \$ 3.00 each

Power supply requires removal and replacement of co-ax plug. Use **CAT# DCSID** 50¢ each

AUTO / MARINE RADIO NOISE FILTER

American International # S-10-ACL.
Reduces and eliminates ignition
and alternator interference (noise
that increases or decreases with
engine speed). For stereos, amps,
equalizers and CB radios up to 10 Amps ,
150 Watts. 4" x 2.27" x 1.9" high.

CAT# NF-10 \$2.50 each • 5 for \$2.00 each

MINIATURE WATER PUMP

Automobile windshield water pump shoots a forceful stream of water from a 1/8" diameter orifice. Intake is 0.5" diameter. Operates on 12 Vdc. Intermittent duty cycle. 2.9" long x 2.5" wide including connector.



CAT # PMP-2 \$ 3.75 each

HUMIDITY METER

Duracraft. Relative humidity scale calibrated from 20% to 100%, with 30% to 50% being designated the "Comfort Zone." 2" diameter meter in a wall-mount or table-top gray plastic case, 3.55" high x 2.66" wide x 1.18" deep.



CAT# HMR-1 \$2.50 each

100 WATT INVERTER

Car-tricity. Plugs into the cigarette lighter jack in your car and converts 12 Vdc to 115 Vac. Operate laptop computers, small televisions (14" or less). battery chargers and practically any device that is powered by a wall transformer. Two prong AC socket output. Includes detailed instructions. Will not operate larger devices that require more than **CAT # INV-100** 100 Watts. \$19.00 each

MULTI-PURPOSE CARRYING CASE

Two compartment, black leatherette case with webbed nylon shoulder strap. Main compartment is 11.5" high x 8" x 5.25" and has vented sides and top.

Smaller, front compartment is 9.5" x 8" x 2" and has three Velcro-style straps inside to hold contents in place. Velcro-style straps on one side of case can be used to fasten 2-3" diameter items. Expandable 8.5" x 5.7" back pocket. Avstar logo on front and top.

CAT # CSE-24 \$7.95 each

PADDED CARRYING CASE

Belkin Media Drive Carrying
Case # F8E161. Designed for
a variety of media drives such
as Zip(R), Jaz(R), & Discman.
Ideal for cameras, audio
equipment or any other small
equipment. A durable black
nylon case featuring three zippered,
padded compartments. Also has
zippered slots to bring cable in or out of
case for in-the-case use of equipment.
Overall size: 4" x 6.5" x 9." Removable shoulder
strap that converts to waist pack.
CAT # CSE-25 \$ 6.50 each

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